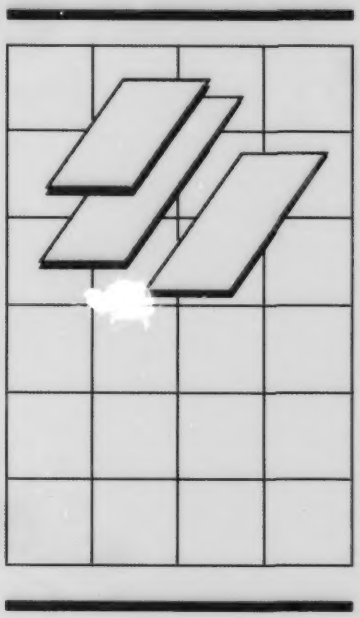

Fire Commissioner's Statistical Report

Alberta

MUNICIPAL AFFAIRS
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1999

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Please direct requests for specific analyses of fire loss statistics, and related fire safety information to the Fire Commissioner's Office.

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CONTENTS

Introduction

80th Statistical Report of the Fire Commissioner 1

Section 1 - Alberta Fire Casualties

Fire Deaths 1990 - 1999 5
Deaths Involving Fire 1990 - 1999 5
Fire Deaths by Geographic Location - 1999 6
Fatal Casualties by Status, Sex & Age - 1999 7
Injured Casualties by Status, Sex & Age - 1999 7
Condition of Fatal Casualties - 1999 8
Action of Fatal Casualties - 1999 8
Condition of Injured Casualties - 1999 9
Action of Injured Casualties - 1999 9
Fire Casualties by Month - 1999 10
Fire Casualties by Time Period - 1999 10
Fire Deaths by Major Property Classifications - 1999 11
Fire Deaths by Act or Omission - 1999 13
Fire Deaths by Ignition Scenarios - 1999 14
Deaths Involving Fire by Ignition Scenarios - 1999 16
Trends in Alberta Fire Deaths 1990 - 1999 18
Fire Injuries by Major Property Classifications - 1999 19
Fire Injuries by Act or Omission - 1999 23
Trends in Alberta Fire Injuries 1990 - 1999 26

Section 2 - Alberta Fire Loss Information

Fire Losses in Alberta 1990 - 1999 29
Fire Losses in Canada 1990 - 1999 29
Trends in Alberta Fires 1990 - 1999 30
Fires and Losses 1990 - 1999 31
Fire Rates and Per Capita Losses 1990 - 1999 32
Average Loss Per Fire 1990 - 1999 32
Fire Losses Related to Economic Indices 1990 - 1999 33
Average Number of Fires by Month 1990 - 1999 34
Average Fire Loss by Month 1990 - 1999 34
Average Number of Fires by Day of Week 1990 - 1999 35
Average Fire Loss by Day of Week 1990 - 1999 35
Average Number of Fires by Hour of Day 1990 - 1999 36
Average Fire Loss by Hour of Day 1990 - 1999 36
Fires by Loss Category - 1999 37
1999 Large Loss Fires ($500, 000 and over) 37
Fires by Major Property Classifications - 1999 38
Property Losses Related to Area of Origin - 1999 41
Property Losses Related to Act or Omission - 1999 43

Property Losses Related to Source of Ignition - 1999 45
Property Losses Related to Fuel or Energy - 1999 47
Property Losses Related to Material First Ignited - 1999 49
Property Losses Related to Initial Detection - 1999 51
Fires by Method of Fire Control and Extinguishment - 1999 52

Section 3 - Alberta Home Fire Losses

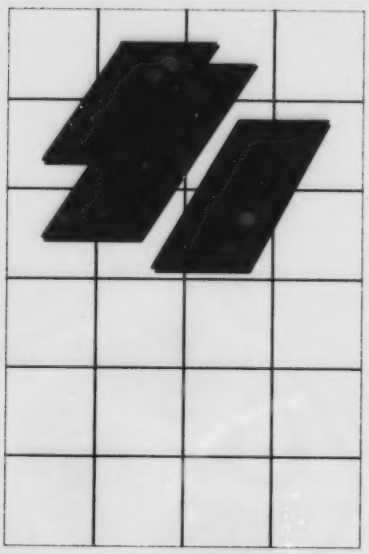
Home Fires by Type of Home - 1999 57
Home Fires by Major Areas of Fire Origin - 1999 57
Home Fires by Major Areas and Sources of Ignition - 1999 58
Home Fires by Major Ignition Scenarios - 1999 60
Major Causes of Home Fires in Alberta - 1999 68
Major Causes of Home Fires in Alberta 1990 - 1999 69
Home Fires by Smoke Alarm Operation - 1999 70
Trends in Alberta Home Fires 1990 - 1999 71

Section 4 - Municipal Fire Loss Statistics

Municipal Fire Loss Statistics 1999, 1990 - 99 75

Section 5 - Glossary

Glossary 91



Introduction

Fire Commissioner's
Statistical Report

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80th Statistical Report of the Fire Commissioner

Fire Commissioner - J. Pat Graham

A total of 6,380 fires were recorded for the province in 1999. These fires resulted in 34 fire deaths, 17 deaths involving fire (see glossary), 385 injuries and $146 million in property losses. Compared to 1998, fire incidents in 1999 decreased by 1.5 per cent and the number of fire deaths increased by 183 per cent (from 12 to 34). Deaths involving fire increased by 113 per cent (from 8 to 17). The number of injuries decreased by 10 per cent, while dollar losses increased by five per cent.

The homes category, which includes one and two family dwellings, apartments/tenements and mobile homes, accounted for a total of 1,618 fires causing a total of 32 deaths (30 fire deaths and two deaths involving fire), 230 injuries and $48 million in property losses. In 1999, 94 per cent of fire deaths (30 of 32) and 60 per cent of all fire injuries (230 of 385) occurred in home fires.

There were no smoke alarms in 43 per cent of the homes that had fires. In the homes that did have smoke alarms, 34 per cent of smoke alarms did not activate due to a lack of a power source (no battery - 19 per cent; dead battery - six per cent; electricity not connected/off - nine per cent).

All 34 fire deaths for 1999 were civilians, 25 were male and nine were female. Two age groups with the highest number of fire deaths were children 0-5 years of age (seven deaths) and seniors over 65 years of age (six deaths). The major causes of fatal fires involving fire deaths were smoking related fires (11); and cooking equipment related fires (three). Eight out of 17 deaths involving fires occurred in vehicle fires.

The major functions and challenges of the Fire Commissioner's Office during 1999 are outlined below:

Fire Loss Statistics

Two research reports, one focusing on the high risk of fire in seniors' residences and another on fires in storage properties during the 10-year period 1989-1998, were published in the May and December issues of *Alberta Fire News*. A research paper examining fire losses on First Nations Reserves in Alberta was presented at the 1999 Aboriginal Injury Prevention Conference. The presentation focused on the similarities of these fire losses to those in inner city neighbourhoods in the U.K. and the U.S.A.

Public Education/Information Programs

The major public fire safety campaigns during 1999 were the Fire Prevention Week Campaign in October and the Holiday Fire Safety Campaign in December.

The theme for Fire Prevention Week, "Fire Drills: The Great Escape", was promoted Alberta-wide to educate the pubic about proper emergency responses to survive a home fire. Information kits from the Fire Commissioner's Office and Fire Prevention Canada as well as a Kit from the National Fire Protection Association were provided to municipal fire departments to help implement the Fire Prevention Week Campaign.

In addition, the Fire Commissioner's Office partnered with McDonald's Restaurants of Canada to promote Fire Prevention Week through elementary schools in 58 municipalities served by McDonald's restaurants.

80th Statistical Report of the Fire Commissioner (cont'd)

Public Education Materials and Fire Prevention Literature

Approximately 75,000 pieces of public fire safety information pamphlets, cards, booklets and videos covering a wide range of fire problems were distributed throughout the province. This distribution was made possible with the assistance of the Alberta fire service and other safety organizations and professionals.

A fire hydrant robot and three back-drop display units depicting home fire safety, as well as Sparky the Fire Dog costumes were made available to fire departments conducting education programs.

Alberta Fire News was published in May and November. Approximately 2,000 copies of each issue were distributed to municipal fire departments, the insurance industry, industrial and hospital fire departments, municipal administrators and other individuals and organizations. The newsletter covered significant fire problems as well as other timely fire safety issues in Alberta.

In addition, a number of new fire prevention and safety videos were purchased and made available for borrowing through the Alberta Labour (now known as Human Resources and Employment) library.

Learn Not To Burn and Risk Watch Programs

Members of the Public Fire Safety Education Committee of the Alberta Fire Chiefs Association and Alberta Labour and Municipal Affairs staff attended ten annual teachers' conventions to promote the *Learn Not To Burn* and *Risk Watch* programs. The conventions provided a venue for one-on-one discussions with elementary school teachers on the value of these teaching resources.

Alberta Weekly Newspaper Association (AWNA) Contest

One newspaper publisher in each of the three circulation categories - under 2,500; 2,501-5,000; and over 5,000, were awarded prizes to recognize outstanding coverage of the 1999 Fire Prevention Week. The winning newspapers were Provost News, Barrhead Leader and Lloydminster Meridian Booster.

Honourable Mention Certificates were awarded to Leduc Representative, Airdrie Echo, Fort Macleod Gazette, Wetaskiwin Times Advertiser, Banff Crag and Canyon and Claresholm Local Press.

Partnerships

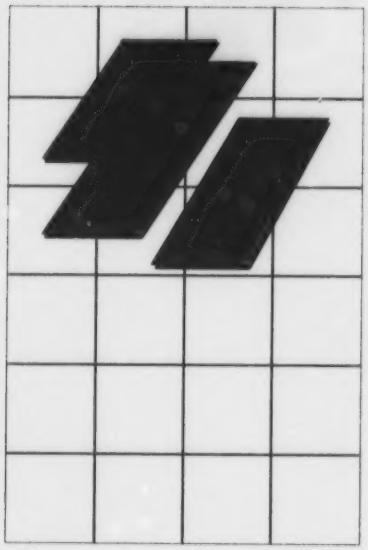
Partnerships and networking opportunities with other safety organizations continued to be pursued with mutual benefit. Partnerships were fostered and maintained with the Alberta Centre for Injury Control and Research at the University of Alberta, McDonald's Restaurants of Canada, the Alberta Fire Chiefs Association, the Alberta Weekly Newspaper Association; nationally with the Council of Canadian Fire Marshals and Fire Commissioners, Fire Prevention Canada, Canadian Association of Fire Chiefs; and internationally with National Fire Protection Association (USA), International Fire Service Training Association, and the International Society of Fire Service Instructors.

The Safety Codes Officer Training Initiative (SCOTI) continued through a partnership effort between the Fire Commissioner's Office, the Alberta Fire Training School and the Safety Codes Council.

The Alberta Fire Training School

In 1999 the Fire Commissioner continued to hold the provincial accreditation for fire training jointly with the Alberta Fire Training School in Vermilion. The school provided training in all fire service career paths including fire prevention. The Fire Commissioner's Office participated in many advisory councils to guide the operations and contents of programs offered by the Fire Training School.

SECTION 1



Alberta Fire Casualties

Fire Commissioner's Statistical Report

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Fire Deaths 1990 – 1999

YEAR	Adult		Child		
	FEMALE	MALE	FEMALE	MALE	TOTAL
1990	8	17	3	5	33
1991	8	20	6	3	37
1992	2	9	3	3	17
1993	11	11	1	6	29
1994	5	16	1	.	22
1995	6	15	4	6	31
1996	8	22	1	3	34
1997	7	12	3	2	24
1998	4	8	.	.	12
1999	7	15	2	10	34
TOTAL	66	145	24	38	273

A fire death is an accidental death directly due to fire or death within one year of a fire injury.

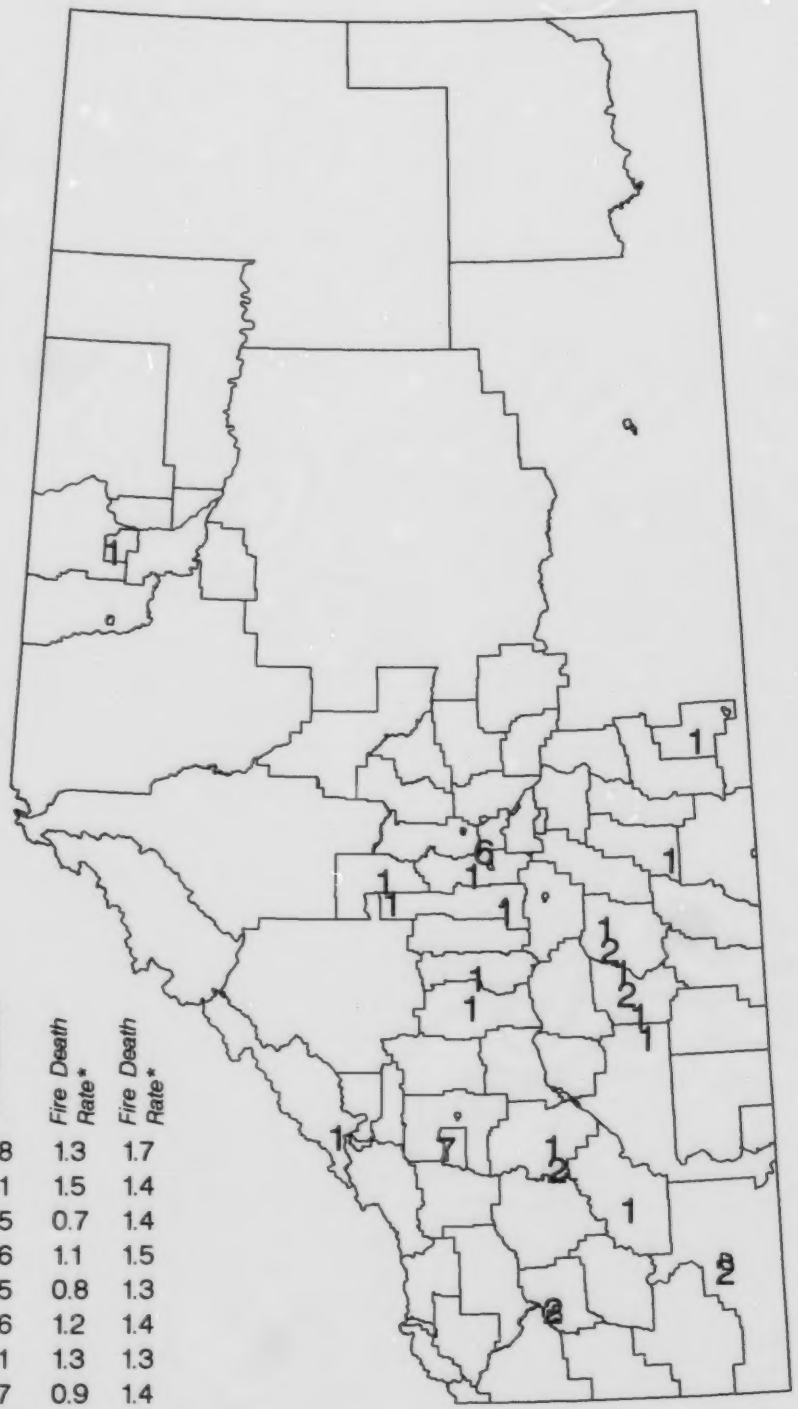
Deaths Involving Fire 1990 – 1999

YEAR	Child		Adult		
	FEMALE	MALE	FEMALE	MALE	TOTAL
1990	1	3	3	8	15
1991	2	1	1	10	14
1992	.	.	1	7	8
1993	.	1	1	5	7
1994	.	.	.	3	3
1995	.	.	1	4	5
1996	1	.	.	6	7
1997	.	2	3	8	13
1998	1	1	1	5	8
1999	1	1	4	11	17
TOTAL	6	9	15	67	97

A death involving fire is a death from causes other than fire, but occurs at a fire incident.

Fire Deaths by Geographic Location — 1999

BROOKS	1
LACOMBE COUNTY	1
WHEATLAND COUNTY	1
COUNTY OF ST. PAUL #19	2
RED DEER COUNTY	1
CALMAR	1
COUNTY OF LETHBRIDGE	2
COUNTY OF MINBURN #27	1
FLAGSTAFF COUNTY	1
LAKELAND COUNTY	2
WHITECOURT	1
REDCLIFF	2
STURGEON COUNTY	1
M.D. OF MACKENZIE #23	1
BONNYVILLE	1
M.D. OF SPIRIT RIVER #133	1
DRAYTON VALLEY	1
SADDLE HILLS COUNTY	1
BANFF	1
INDIAN RESERVES	12
CITY OF CALGARY	7
CITY OF EDMONTON	6
CITY OF MEDICINE HAT	2
CITY OF WETASKIWIN	1



Death Rates

Year	*Population*	*Fire Deaths*	*Other Deaths Involving Fire*	*Total Deaths*	*Fire Death Rate**	*Fire Death Rate**
1990	2,469,069	33	15	48	1.3	1.7
1991	2,510,001	37	14	51	1.5	1.4
1992	2,543,033	17	8	25	0.7	1.4
1993	2,574,890	29	7	36	1.1	1.5
1994	2,601,282	22	3	25	0.8	1.3
1995	2,615,873	31	5	36	1.2	1.4
1996	2,636,489	34	7	41	1.3	1.3
1997	2,695,474	24	13	37	0.9	1.4
1998	2,730,818	12	8	20	0.4	1.1
1999	2,819,423	34	17	51	1.2	.
		Alberta				Canada

*Fire Deaths per 100,000 population

Fatal Casualties by Status, Age & Sex - 1999

Fire Deaths

Status and Sex of Casualty		Age in Years									
		Unknown	0-5	6-15	16-25	26-35	36-45	46-55	56-65	Over 65	Total
CIVILIAN	FEMALE	.	2	.	.	1	1	.	1	4	9
	MALE	1	5	3	3	1	4	2	1	2	22
Total Deaths		1	7	3	3	2	5	2	2	6	31

Commentary: On average, one fire death occurred every 11 days in Alberta in 1999. Most fire deaths were in young children (0-5) (21%), followed by the 36-45 (18%) and over 65 age groups (18%).

Injured Casualties by Status, Age & Sex - 1999

Fire Injuries

Status and Sex of Casualty		Age in Years									
		Unknown	0-5	6-15	16-25	26-35	36-45	46-55	56-65	Over 65	Total
FIREFIGHTER	FEMALE	1	.	.	.	.	.	.	.	.	1
	MALE	5	.	.	6	8	28	24	3	.	74
CIVILIAN	FEMALE	11	6	8	17	18	14	12	4	16	106
	MALE	21	11	21	27	50	38	15	10	11	204
Total Injuries		38	17	29	50	76	80	51	17	27	385

Commentary: On average, there were 1.1 fire injuries per day in Alberta in 1999. The highest number of injuries (80) occurred in the 36-45 age group.

Condition of Fatal Casualties - 1999

Condition of Casualty	No.	%
Condition of casualty-Unknown	8	23.5
Asleep at time of fire	9	26.5
Impaired: alcohol/drugs/medicn.	6	17.6
Awake and normal	4	11.8
Too young to react to fire	4	11.8
Children left unattended	1	2.9
Condition of casualty-Unclassified	2	5.9
Total	34	100.0

Commentary: Twenty -seven percent of the fatal casualties were asleep at the time of the fire.

Action of Fatal Casualties - 1999

Action of Casualty	No.	%
Action of casualty-Unknown	14	41.2
Injured while attempting escape	5	14.7
Overexertion, heartattack	1	2.9
Entered/remained for rescue purposes	1	2.9
Loss of judgment/panic	3	8.8
Did not act	4	11.8
Action of casualty-Unclassified	6	17.6
Total	34	100.0

Commentary: Fifteen percent of the fatal casualties were killed while trying to escape. This points to the value of developing and practicing home fire escape plans.

Condition of Injured Casualties - 1999

Condition of Casualty	No.	%
Asleep at time of fire	46	11.9
Bedridden/physical handicap	3	0.8
Impaired: alcohol/drugs/medicn.	24	6.2
Awake and normal	182	47.3
Too young to react to fire	6	1.6
Mental handicap(senile)	2	0.5
Children left unattended	5	1.3
Condition of casualty-Unclassified	49	12.7
Condition of casualty-Unknown	68	17.7
Total	385	100.0

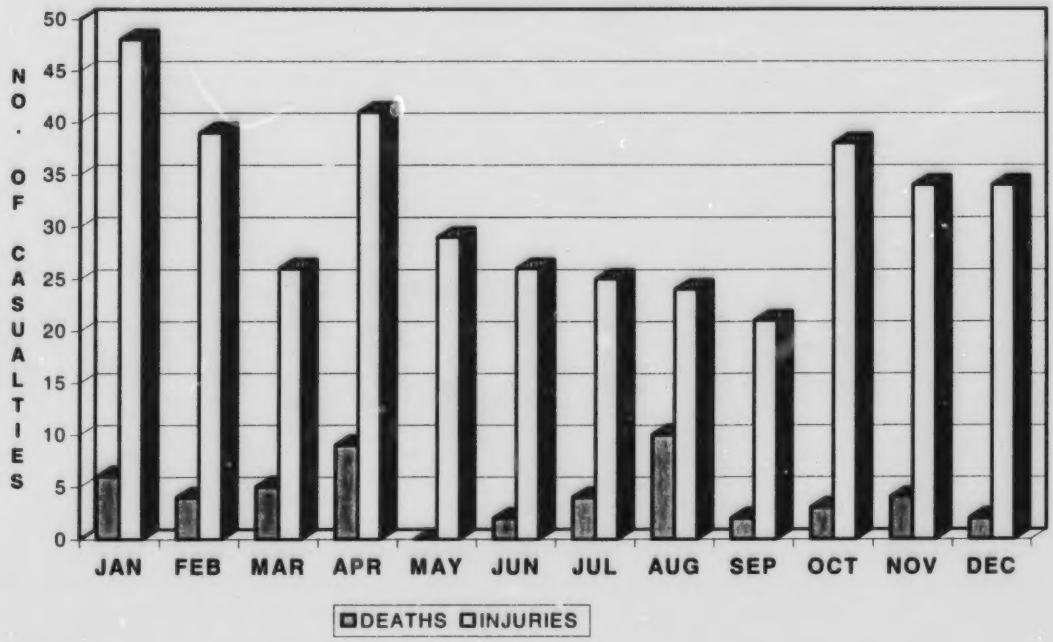
Commentary: Most of the injured casualties (47%) were awake and normal at the time of the fire. This points to the need for educating the public on the proper responses during fire emergencies.

Action of Injured Casualties - 1999

Action of Casualty	No.	%
Injured while attempting escape	54	14.0
Overexertion, heart attack	5	1.3
Entered/remained for rescue purposes	17	4.4
Entered/remained for firefighting	140	36.4
Entered/remained to save property	22	5.7
Loss of judgment/panic	17	4.4
Received delayed warning	13	3.4
Did not act	28	7.3
Action of casualty-Unclassified	31	8.1
Action of casualty-Unknown	58	15.1
Total	385	100.0

Commentary: Most fire injuries (36%) occurred when persons entered or remained for firefighting, followed by those that were injured while attempting to escape (14%).

Fire Casualties by Month - 1999



Fire Casualties by Time Period - 1999

Time Periods	TYPE OF CASUALTY			
	All Injuries		Fire Deaths	
	No.	%	No.	%
2:30pm - 10.29pm	145	37.7	9	26.5
6:30am - 2:29pm	129	33.5	9	26.5
10:30pm-6:29am	111	28.8	16	47.1
Total	385	100	34	100

Commentary: The majority of fire deaths (47%) occurred during the sleeping hours of 10:30 pm to 6:30 am, while most of the injuries (38%) occurred during the afternoon and evening hours of 2:30 pm to 10:30 pm.

Fire Deaths By Major Property Classification - 1999

Property Classification		FIRE DEATHS		DEATHS INVOLVING FIRE	
		No.	%	No.	%
Residential	One and two family dwellings	22	64.7	2	11.8
	Mobile home	5	14.7	.	.
	Apartments	3	8.8	.	.
	Motor home/camperized van	.	.	1	5.9
	Sub Total	30	88.2	3	17.7
Special Property-Transportation Equip.	General truck (non-flammable cargo)	.	.	4	23.5
	Automobile (Incl. car/ambulance)	.	.	3	17.6
	Contractor's shed	1	2.9	.	.
	Construction equipment (excludes crane)	.	.	1	5.9
	Sub Total	1	2.9	8	47.1
Miscellaneous Property	Cement/glass/pottery mfg.-Unclass.	.	.	1	5.9
	Miscellaneous-Unclass.	.	.	1	5.9
	Sub Total	.	.	2	11.8
Storage Properties	Individual auto parking garage	1	2.9	.	.
	Bus/truck/auto dealer/cab parking garage	1	2.9	.	.
	Sub Total	2	5.9	.	.
Mercantile	General maintenance shop	.	.	2	11.8
	Sub Total	.	.	2	11.8

(Continued)

Fire Deaths By Major Property Classification – 1999 (cont'd)

Property Classification		FIRE DEATHS		DEATHS INVOLVING FIRE	
		No.	%	No.	%
Institutional	Home for the aged w/o nursing staff	1	2.9	.	.
	Sub Total	1	2.9	.	.
Assembly	Restaurant/cafe/diner	.	.	1	5.9
	Sub Total	.	.	1	5.9
Industrial Manufacturing Properties	Industrial mfg.-Unclass.	.	.	1	5.9
	Sub Total	.	.	1	5.9
Total		34	100.0	17	100.0

Commentary: Eighty-eight per cent of all fire deaths occurred in residential fires. Deaths involving fire occurred most often in motor vehicle related fires (47%).

Fire Deaths by Act or Omission - 1999

Act or Omission		FIRE DEATHS		DEATHS INVOLVING FIRE	
		No.	% Of Total	No.	% Of Total
Human Failing	Asleep (suspect alcohol/drugs/medicn.)	4	11.8	1	5.9
	Ignorance of hazard	2	5.9	2	11.8
	Physical or mental disability	.	.	2	11.8
	Human failing-Unclassified	2	5.9	.	.
	Asleep	1	2.9	.	.
	Impaired (suspect alcohol/drugs/medicn.)	1	2.9	.	.
	Sub Total	10	29.4	5	29.4
Incendiary	Unknown	6	17.6	1	5.9
	Suspected arson	1	2.9	2	11.8
	Arson/set fire-Unknown	1	2.9	.	.
	Arson for vengeful/spiteful purposes	1	2.9	.	.
	Sub Total	9	26.5	3	17.6
Misuse of Source of Ignition	Smoker's material	7	20.6	.	.
	Child playing with	3	8.8	.	.
	Welding or cutting too close to	.	.	2	11.8
	Sub Total	10	29.4	2	11.8
Mech., Electr. Failure, Malfunction	Mech., Elect. Failure-Unclassified	2	5.9	.	.
	Automatic control failure	1	2.9	.	.
	Electrical short circuit	1	2.9	.	.
	Part failure, leak, break	.	.	1	5.9
	Sub Total	4	11.8	1	5.9
Vehicle Accident	Automobile accident	.	.	5	29.4
	Sub Total	.	.	5	29.4
Misuse of Material Ignited	Fuel spilled accidentally	1	2.9	1	5.9
	Sub Total	1	2.9	1	5.9
Total		34	100.0	17	100.0

Commentary: Misuse of smoker's material (21%), followed by asleep (suspected alcohol/drugs/medication) (12%) were the leading known acts or omissions in fire deaths. Automobile accidents (29%) was the leading known act or omission in deaths involving fire.

Fire Deaths by Ignition Scenarios - 1999

One and two family dwellings

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Stove/top burner (fire in pan)	Human failing-Unclassified	Furniture/furnishings-Unclassified	2
Central heating unit, furnace/boiler	Mech., Elect. Failure-Unclassified	Material first ignited-Unknown	2
Switchgear (electrical)	Automatic control failure	Garbage, trash, rubbish	1
Candle, taper	Ignorance of hazard	Floor covering: carpet/rug	2
Cigarette	Smoker's material	Furniture (upholstered)	2
		Clothing: cotton	1
		Wastepaper	2
	Asleep (suspect alcohol/drugs/medicn.)	Furniture (upholstered)	1
		Furniture/furnishings-Unknown	2
Smoker's material unknown	Smoker's material	Furniture (upholstered)	1
Match	Arson for vengeful/spiteful purposes	Gasoline	1
Lighter	Child playing with	Bedding	1
Match/lighter cannot be det.	Child playing with	Furniture (upholstered)	2
Temporary electrical wiring/cable	Electrical short circuit	Structural materials-Unclassified	1
Unknown	Suspected arson	Natural gas	1
	Arson/set fire-Unknown	Material first ignited-Unknown	1
	Unknown	Material first ignited-Unknown	4
Sub Total			27

Apartments

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Lighter	Impaired (suspect alcohol/drugs/medicn.)	Clothing: synthetic	1
Incandescent lamp/lightbulb/heat lamp	Asleep (suspect alcohol/drugs/medicn.)	Material first ignited-Unknown	1
Smoker's material unknown	Smoker's material	Furniture (upholstered)	1
Sub Total			3

Fire Deaths by Ignition Scenarios – 1999 (cont'd)

Auto parking garages

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Unknown	Unknown	Material first ignited-Unknown	1
	Fuel spilled accidentally	Flammable liq.(flash pt<=37C):solvent	1
Sub Total			2

Home for the aged w/o nursing staff

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Cigarette	Asleep	Clothing: synthetic	1
Sub Total			1

Contractor's shed

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Cooking equipment-unclassified	Unknown	Material first ignited-Unknown	1
Sub Total			1

Total Fire Deaths	34

Commentary: Misuse of smoker's material leading to the ignition of a variety of materials was the leading ignition scenario (32%) in fire deaths.

Deaths Involving Fire by Ignition Scenarios - 1999

General truck (non-flammable cargo)

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Battery/rectifier/charger	Automobile accident	Propane or butane air mixture	1
Unknown	Automobile accident	Gasoline	3
Sub Total			4

Automobile (incl. car/ambulance)

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Internal combustion engine	Asleep (suspect alcohol/drugs/medicn.)	Hay	1
Match	Physical or mental disability	Propane/butane/liquefied petroleum gases	1
Unknown	Automobile accident	Material first ignited-Unknown	1
Sub Total			3

One and two family dwellings

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Service water heater	Fuel spilled accidentally	Gasoline	1
Match	Suspected arson	Propane/butane/liquefied petroleum gases	1
Sub Total			2

General maintenance shop

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Welding equipment	Welding or cutting too close to	Natural gas	2
Sub Total			2

Restaurant/cafe/diner

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Unknown	Suspected arson	Material first ignited-Unknown	1
Sub Total			1

Deaths Involving Fire by Ignition Scenarios – 1999 (cont'd)

Motor home/camperized van

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Internal combustion engine	Unknown	Flammable liq.(flash pt<=37C):solvent	1
Sub Total			1

Industrial mfg.-Unclass.

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Central heating unit, furnace/boiler	Part failure, leak, break	Natural gas	1
Sub Total			1

Construction equipment (excludes crane)

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Unknown	Ignorance of hazard	Natural gas	1
Sub Total			1

Cement/glass/pottery mfg.-Unclass.

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Welding equipment	Ignorance of hazard	Tar/asphalt	1
Sub Total			1

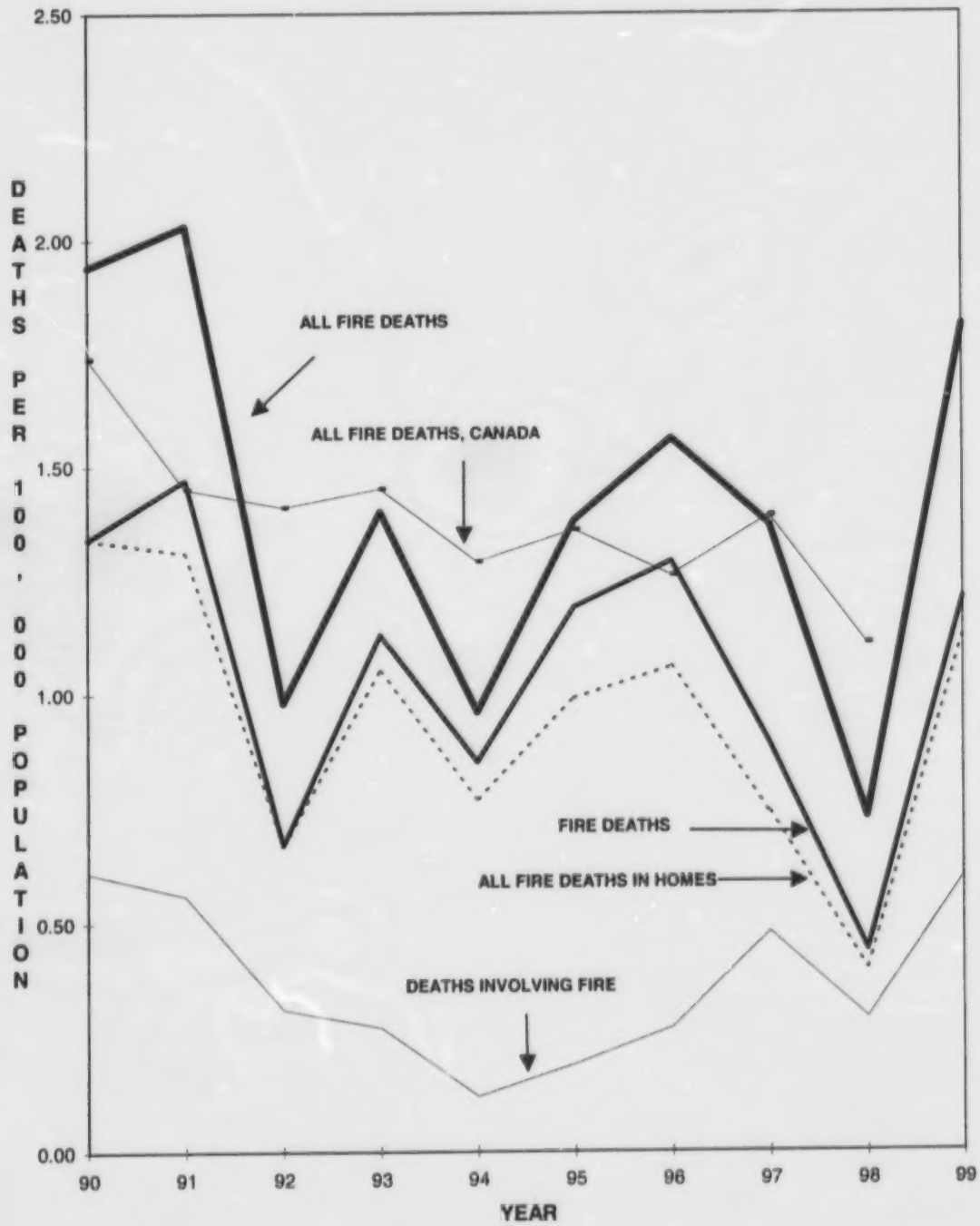
Miscellaneous-Unclass.

Source of Ignition	Act or Omission	Material First Ignited	Deaths
Match	Physical or mental disability	Gasoline	1
Sub Total			1

Total Deaths Involving Fire	17

Commentary: Automobile accidents (29%) was the leading act or omission in deaths involving fire. This was followed by suspected arson (12%), physical or mental disability (12%) and ignorance of hazard (12%).

TRENDS IN ALBERTA FIRE DEATHS, 1990 – 1999



Commentary: Since a remarkable drop in fire death rates for all fire deaths (fire deaths & deaths involving fire) between 1991 (1.4) and 1992 (0.6), these rates have fluctuated around an average of 0.9 per 100,000 population until 1998. In 1999 the fire death rate jumped to 1.8

Fire Injuries by Major Property Classification - 1999

Property Classification		Minor Injury	Light Injury	Serious Injury	Total	% of Total
Assembly	Amusement centre/exhibition stand	.	1	.	1	0.3
	Exhibition/exposition hall	1	.	.	1	0.3
	Arena/stadium/amusement tent	3	.	.	3	0.8
	High school/comb.: high/jun./elem.	.	2	.	2	0.5
	Church hall (incl. office/kitchen)	2	.	.	2	0.5
	Restaurant/cafe/diner	3	1	1	5	1.3
	Sub Total	9	4	1	14	3.6
Institutional	Vocational rehab. centre	1	.	.	1	0.3
	Home for the aged w/o nursing staff	3	.	.	3	0.8
	Sub Total	4	.	.	4	1.0
Residential	Dwelling (year-round:1-family)	74	24	9	107	27.8
	Dwelling (year-round:2-family)	16	1	.	17	4.4
	Dwelling (farm:1-family)	2	1	1	4	1.0
	Apt./tenement/flat(3-20 units w bus.)	1	2	1	4	1.0
	Apt./tenement/flat(3-20 units w/o bus.)	24	20	7	51	13.2
	Apt./tenement/flat(over 20 units)	17	6	3	26	6.8
	Apt./tenement/flat Unclass.	1	.	1	2	0.5
	Rooming/board./lodg. house (4-8 people)	4	.	.	4	1.0
	Hotel/inn/lodge (year round use)	1	1	.	2	0.5
	Motor hotel/motel (over 20 units)	1	.	.	1	0.3
	Mobile home	16	3	.	19	4.9

(Continued)

Fire Injuries by Major Property Classification – 1999 (cont'd)

Property Classification		Minor Injury	Light Injury	Serious Injury	Total	% of Total
Residential	Travel/holiday trailer	.	.	1	1	0.3
	Motor home/camperized van	.	1	.	1	0.3
	Camper on/off truck	1	.	.	1	0.3
	Sub Total	158	59	23	240	62.3
Business and Personal Service	General business office	1	.	.	1	0.3
	Medical/research/-scientific office	1	.	.	1	0.3
	Sub Total	2	.	.	2	0.5
Mercantile	Rug/floor covering store	1	.	.	1	0.3
	Sporting goods/bicycle sales and repairs	2	1	.	3	0.8
	General maintenance shop	1	.	.	1	0.3
	Vehicle repair/paint shop	4	1	1	6	1.6
	Vehicle/trailer sales	1	.	.	1	0.3
	Vehicle accessory sales	2	.	.	2	0.5
	Large variety store (> 1000 sq. m)	.	1	.	1	0.3
	Mall (public area)	2	.	.	2	0.5
	Sub Total	13	3	1	17	4.4
Industrial Manufacturing Properties	Industrial chemical mfg.	1	.	.	1	0.3
	Petroleum refineries	5	1	1	7	1.8
	Asphalt/coal product mfg.	1	.	.	1	0.3
	Chem./petro./pain-t/plastic mfg.-Unclass.	.	.	1	1	0.3
	Wood/lumber mfg.	1	.	.	1	0.3

(Continued)

Fire Injuries by Major Property Classification - 1999 (cont'd)

Property Classification		Minor Injury	Light Injury	Serious Injury	Total	% of Total
Industrial Manufacturing Properties	Metal products mfg.	2	.	.	2	0.5
	Machinery mfg.	.	1	.	1	0.3
	Industrial mfg.-Unclass.	1	.	.	1	0.3
	Sub Total	11	2	2	15	3.9
Storage Properties	Livestock storage	1	.	.	1	0.3
	Lumberyards/building material storage	.	.	1	1	0.3
	Individual auto parking garage	10	3	.	13	3.4
	Warehouse (general)	1	.	.	1	0.3
	Storage properties Unclass.	1	.	.	1	0.3
	Sub Total	13	3	1	17	4.4
Special Property-Transportation Equip.	Brush/grass/light ground cover/open land	7	.	2	9	2.3
	Fences/poles/railroad ties	.	1	.	1	0.3
	Trash/rubbish (incl. containers)	2	.	.	2	0.5
	Outdoor property-Unclass.	6	.	1	7	1.8
	Building under construction	.	1	.	1	0.3
	Building under demolition	.	1	.	1	0.3
	Vacant/condemned property-w/o contents	3	3	1	7	1.8
	Unoccupied property (>30 days)	1	.	.	1	0.3
	Under const./demol./vac. prop.-Unclass.	1	.	.	1	0.3
	Automobile (Incl. car/ambulance)	1	3	.	4	1.0
	Bus/trackless trolley	1	.	.	1	0.3

(Continued)

Fire Injuries by Major Property Classification - 1999 (cont'd)

Property Classification		Minor Injury	Light Injury	Serious Injury	Total	% of Total
Special Property-Transportation Equip.	Flamm. liquid/chem. tank truck	.	1	.	1	0.3
	General truck (non flammable cargo)	6	.	3	9	2.3
	Vehicle and hauling vehicle	1	.	.	1	0.3
	Semi-trailer truck	.	1	.	1	0.3
	Construction equipment (excludes crane)	2	.	.	2	0.5
	8192	3	.	.	3	0.8
	8890	1	.	.	1	0.3
	Sub Total	35	11	7	53	13.8
Miscellaneous Property	Chemical/biological lab	2	.	.	2	0.5
	Medical lab	1	.	.	1	0.3
	Barn storage (feed/vehicle)	.	1	.	1	0.3
	Animal barn (cattle/pigs/horses etc.)	1	.	.	1	0.3
	Crops/orchards/straw stacks/bales	1	.	.	1	0.3
	Shed (inc. implement shed)	7	.	.	7	1.8
	Electric light/power distrib. system	.	1	.	1	0.3
	Gas distribution system/pipeline	2	3	1	6	1.6
	Petroleum/nat. gas well	.	2	.	2	0.5
	Groundskeeping equip./lawnmowers	.	.	1	1	0.3
	Sub Total	14	7	2	23	6.0
Total		259	89	37	385	100.0

Commentary: Thirty-three percent of all fire injuries occurred in residential properties. The majority of these occurred in one and two family dwellings (33%) and apartments (22%).

Fire Injuries by Act or Omission - 1999

Act or Omission		Injury, Minor	Injury, Light	Injury, Serious	Total	% Of Total
Incendiary	Unknown	10	3	4	17	4.4
	Arson for vengeful/spiteful purposes	5	.	.	5	1.3
	Suspected arson	11	2	1	14	3.6
	Arson/set fire-Unknown	7	5	.	12	3.1
	Riot, civil commotion, charges laid	1	.	.	1	0.3
	Vandalism, mischief, no charges laid	3	1	1	5	1.3
	Sub Total	37	11	6	54	14.0
Misuse of Source of Ignition	Misuse of source of ignit.-Unknown	2	3	.	5	1.3
	Smoker's material	34	19	5	58	15.1
	Thawing	.	1	.	1	0.3
	Inadequate control of 'open' fire	8	.	1	9	2.3
	Child playing with	25	9	4	38	9.9
	Welding or cutting too close to	5	.	.	5	1.3
	Torch too close to	1	.	.	1	0.3
	Misuse of source of ignit.-Unclassified	1	2	.	3	0.8
	Sub Total	76	34	10	120	31.2
Misuse of Material Ignited	Fuel spilled accidentally	6	1	1	8	2.1
	Improper fuelling technique	.	.	1	1	0.3
	Flammable liquid to kindle fire	.	.	1	1	0.3
	Cleaning, washing parts	2	1	.	3	0.8
	Overheated cooking oil, grease, wax	23	11	5	39	10.1
	Combustible placed too close to heat	3	2	1	6	1.6
	Improper storage	3	3	.	6	1.6
	Misuse of Mat. Ignited Unclassified	1	4	2	7	1.8

(Continued)

Fire Injuries by Act or Omission – 1999 (cont'd)

Act or Omission		Injury, Minor	Injury, Light	Injury, Serious	Total	% Of Total
Misuse of Material Ignited	Sub Total	38	22	11	71	18.4
Mech., Electr. Failure, Malfunction	Mech., Elect. Failure-Unknown	8	1	.	9	2.3
	Part failure, leak, break	11	.	1	12	3.1
	Automatic control failure	2	.	.	2	0.5
	Manual control failure	2	.	.	2	0.5
	Electrical short circuit	15	2	.	17	4.4
	Part worn out	1	.	.	1	0.3
	Mech., Elect. Failure-Unclassified	5	1	1	7	1.8
	Sub Total	44	4	2	50	13.0
Constructn., Design, Installn. Def.	Constrn./design/instalIn. def.-Unknown	1	2	.	3	0.8
	Design deficiency	1	3	.	4	1.0
	Installed too close to combustible	2	.	.	2	0.5
	Other installation deficiency	.	1	.	1	0.3
	Sub Total	4	6	.	10	2.6
Misuse of Equipment	Overfuelling	.	1	1	2	0.5
	Misuse of equipment-Unclassified	1	.	.	1	0.3
	Sub Total	1	1	1	3	0.8
Human Failing	Asleep	5	1	.	6	1.6
	Temporary loss of judgement	.	1	.	1	0.3
	Physical or mental disability	1	3	.	4	1.0
	Accident	22	3	4	29	7.5
	Impaired (suspect alcohol/drugs/medicn.)	1	.	1	2	0.5
	Asleep (suspect alcohol/drugs/medicn.)	2	.	.	2	0.5
	Ignorance of hazard	17	1	1	19	4.9

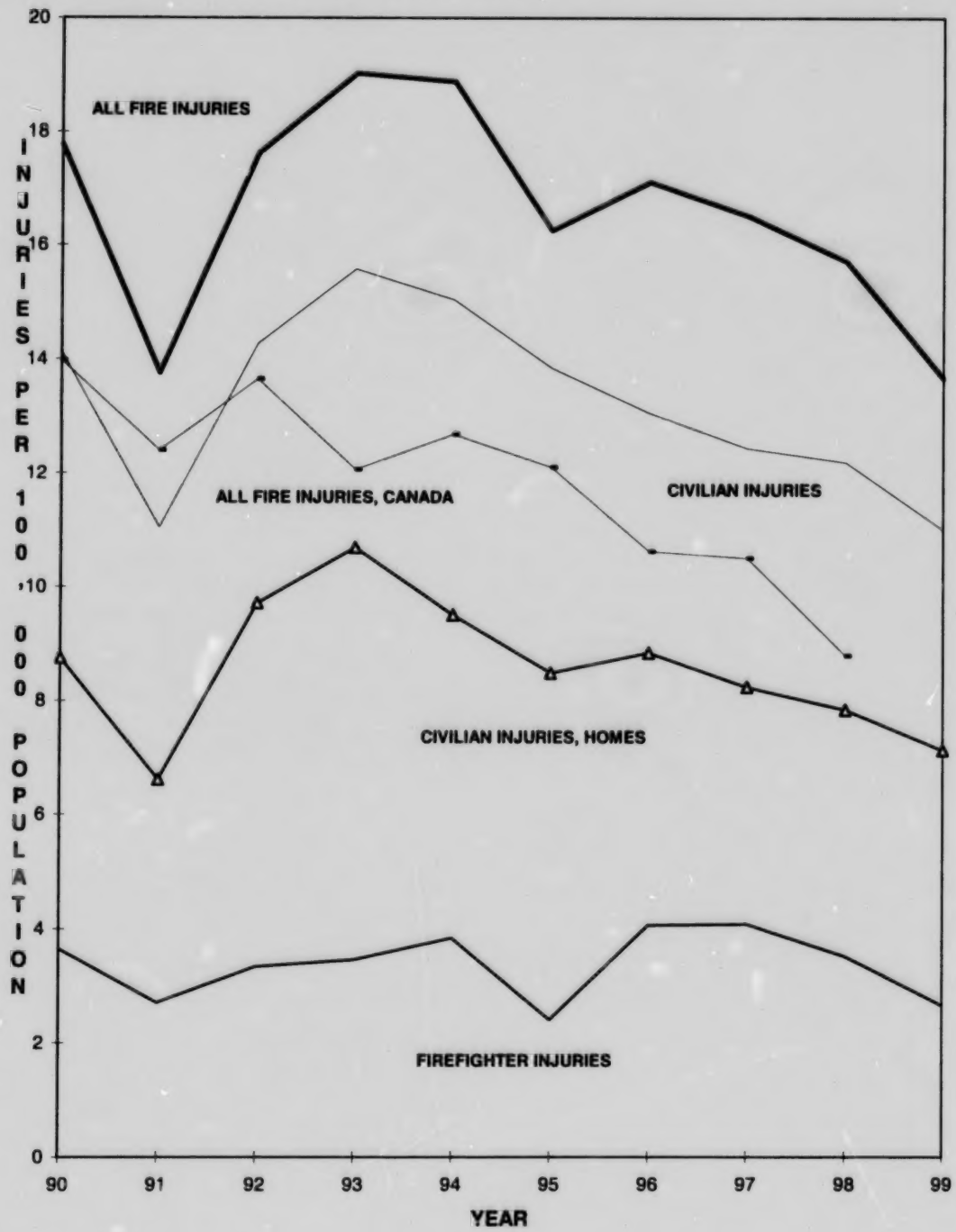
(Continued)

Fire Injuries by Act or Omission - 1999

Act or Omission		Injury, Minor	Injury, Light	Injury, Serious	Total	% Of Total
Human Failing	Distracted, preoccupied	3	1	.	4	1.0
	Paper fell out	1	.	.	1	0.3
	Sub Total	52	10	6	68	17.7
Vehicle Accident	Automobile accident	1	.	.	1	0.3
	Sub Total	1	.	.	1	0.3
Miscellaneous	Miscellaneous-Unclassified	5	1	1	7	1.8
	Hot exhaust/catalytic converter	1	.	.	1	0.3
	Sub Total	6	1	1	8	2.1
Total		259	89	37	385	100.0

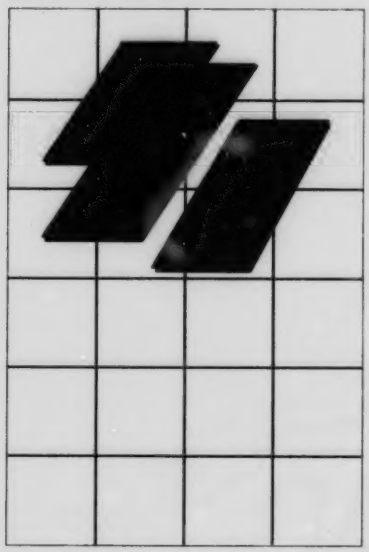
Commentary: The five major known acts or omissions in fire injuries were: misuse of smoker's material (15%), overheated cooking oil, grease or wax (10%), children playing with (10%), accident (8%) and ignorance of hazard (5%).

Trends in Alberta Fire Injuries, 1990 - 1999



Commentary: Rates for all fire injuries (sum of civilian injuries and firefighter injuries) have been consistently higher in Alberta than in Canada. A gradual declining trend since 1993 is evident in the civilian injury rates depicted above. Public education programs must focus on how to respond during fire emergencies to achieve further reductions in injury rates.

SECTION 2



Alberta Fire Loss Information

Fire Commissioner's Statistical Report

1 9 9 9

Fire Losses in Alberta 1990 - 1999

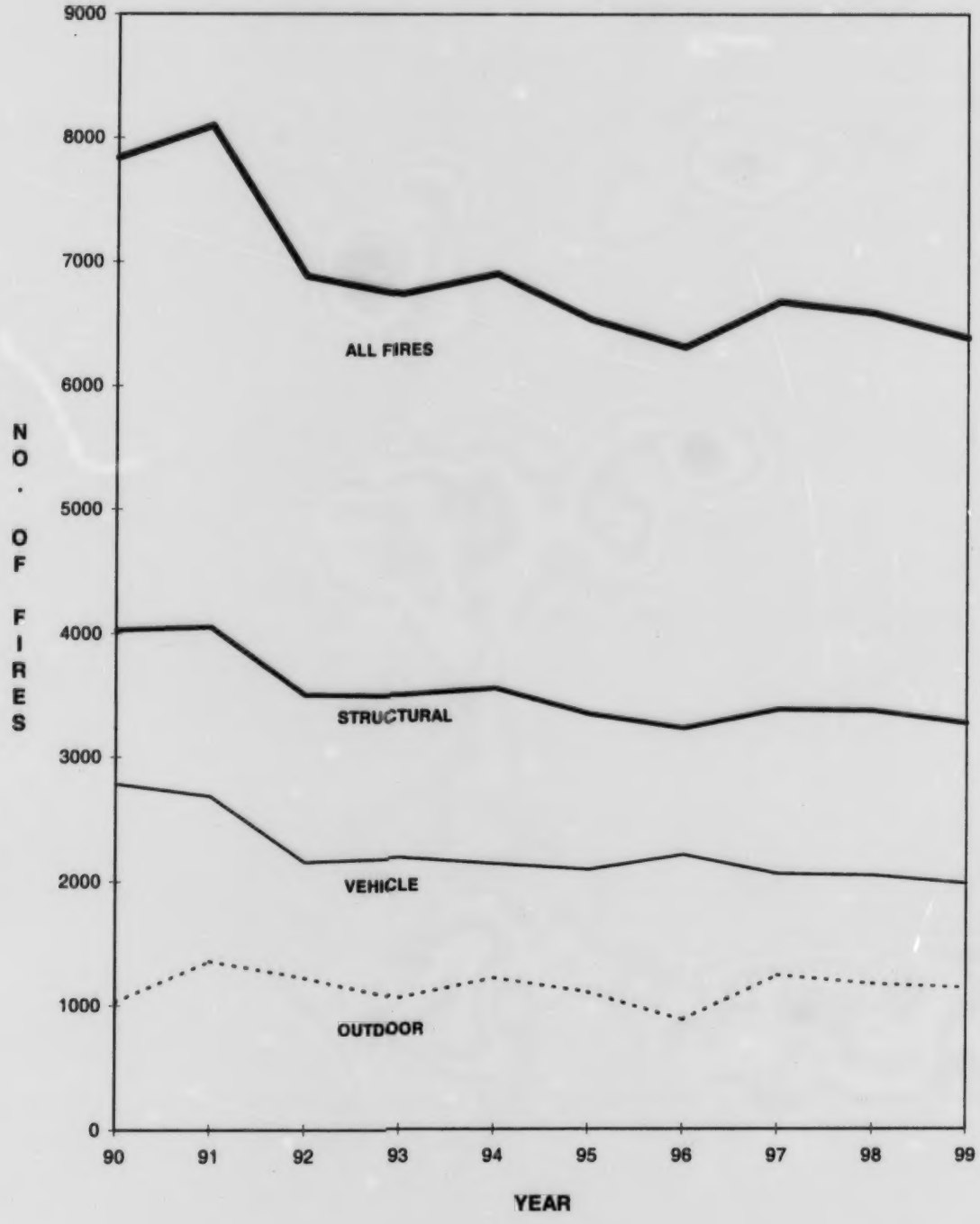
YEAR	FIRES	DEATHS	INJURIES	$ LOSSES
1990	7,836	48	440	135,948,786
1991	8,097	51	345	117,713,851
1992	6,882	25	448	103,587,506
1993	6,735	36	491	103,320,281
1994	6,897	25	490	110,138,438
1995	6,528	37	424	111,140,466
1996	6,304	41	451	120,556,379
1997	6,670	37	448	141,960,034
1998	6,579	20	429	139,516,846
1999	6,380	51	385	146,188,508
TOTAL	68,908	371	4,351	1,230,071,095
Average	6,891	37	435	123,007,110

Fire Losses in Canada 1990 - 1999

YEAR	FIRES	DEATHS	INJURIES	$ LOSSES
1990	68,007	481	3,874	1,237,393,172
1991	68,150	406	3,476	1,239,716,205
1992	65,999	401	3,874	1,241,390,000
1993	65,877	417	3,463	1,181,892,872
1994	65,716	376	3,681	1,166,889,153
1995	64,251	400	3,551	1,110,839,184
1996	60,138	374	3,152	1,163,336,515
1997	56,292	416	3,149	1,291,640,983
1998	55,257	334	2,654	1,136,154,329
1999	.	.	.	.
TOTAL	569,687	3,605	30,874	10,769,252,413
AVERAGE	63,299	401	3,430	1,196,583,601

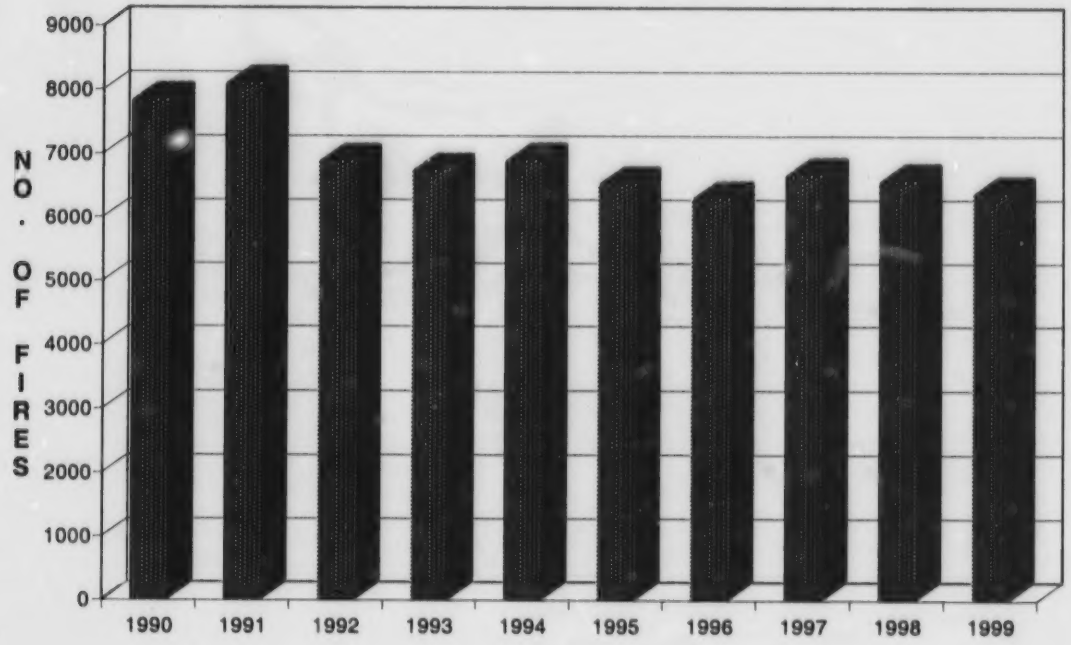
Commentary: Compared to 1998 fire loss figures for Canada (1999 statistics unavailable), Alberta accounted for 12% of incidents, 15% of deaths, 15% of injuries and 13% of $ losses from fires in Canada in 1999.

Trends in Alberta Fires, 1990 – 1999

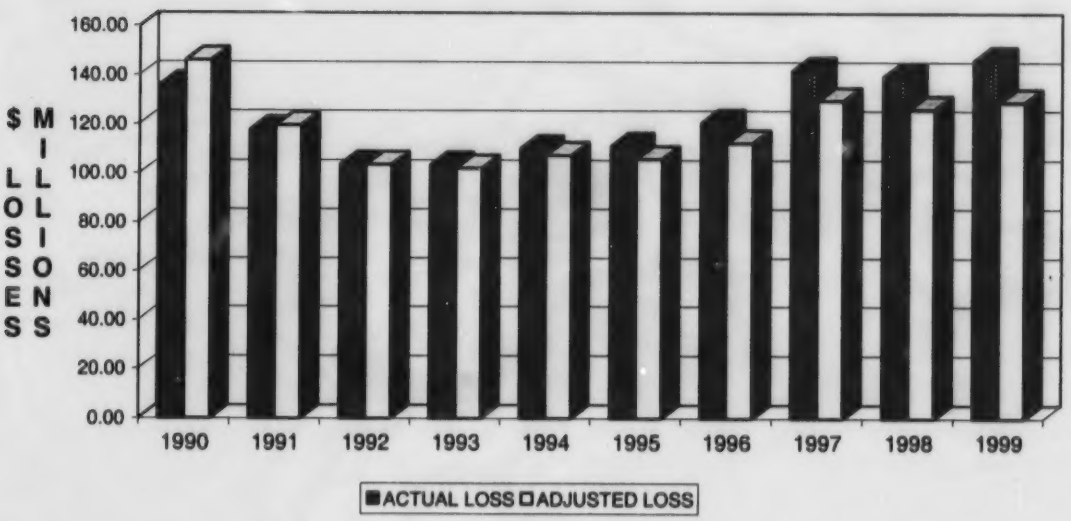


Commentary: From an annual average of 6,891 fires during 1990-1999, there were 3,521 structural fires (51%), 2,231 vehicle fires (32%) and 1,139 outdoor fires (17%).

Fires and Losses 1990 - 1999



Commentary: The average number of fires for the period 1990 - 1999 is 6,891. The number of fires in 1999 decreased by 3% compared to 1998.



Commentary: Adjusted losses were calculated from actual losses using the Annual Consumer Price Index (C.P.I.) figures for Alberta obtained from Statistics Canada. The 1992 C.P.I.=100.

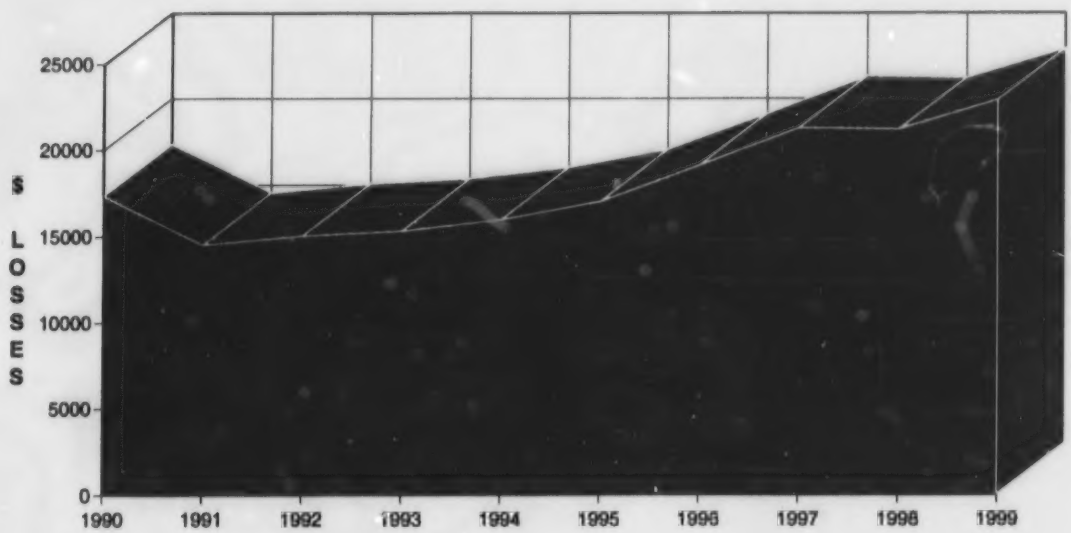
Fire Rates and Per Capita Losses 1990 - 1999

Year	Population	Number of Fires	Fire Rate	Loss Estimate	Loss Per Capita
1990	2,469,069	7,836	3.2	135,948,786	55.1
1991	2,510,001	8,097	3.2	117,713,851	46.9
1992	2,543,033	6,882	2.7	103,587,506	40.7
1993	2,574,890	6,735	2.6	103,320,281	40.1
1994	2,601,282	6,891	2.6	110,138,438	42.3
1995	2,615,873	6,528	2.5	111,140,466	42.5
1996	2,636,489	6,303	2.4	120,556,379	45.7
1997	2,695,474	6,669	2.5	141,960,034	52.7
1998	2,730,818	6,579	2.4	139,516,846	51.1
1999	2,819,423	6,380	2.3	146,188,508	51.9

*Fire Rate = Number of fires per 1000 population

Commentary: The fire rate for the province has averaged 2.4 between 1995 and 1999.

Average Loss Per Fire 1990 - 1999

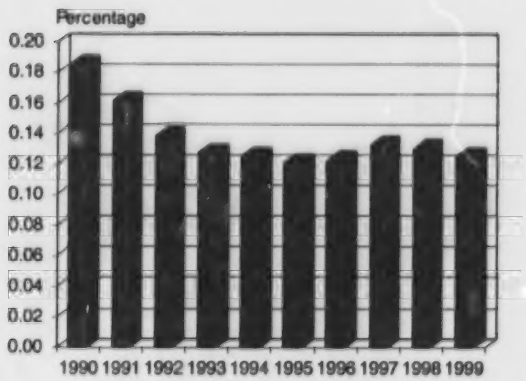


Fire Losses Related to Economic Indices 1990 - 1999

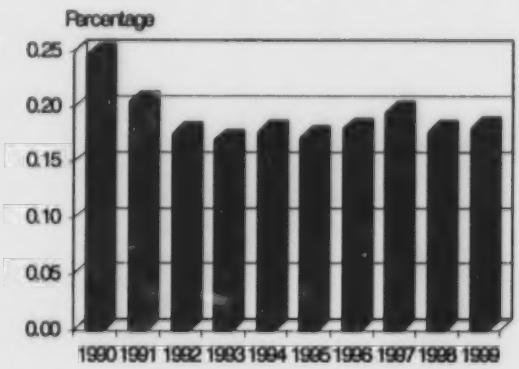
Year	Fire Losses ($)	Gross Domestic Product ($ million)	% of GDP	Personal Income ($ million)	% of Personal Income
1990	135,948,786	73,373	0.19	54,993	0.25
1991	117,713,851	73,027	0.16	57,523	0.20
1992	103,587,506	75,069	0.14	59,012	0.18
1993	103,320,281	81,370	0.13	61,095	0.17
1994	110,138,438	88,116	0.12	62,051	0.18
1995	111,140,466	92,120	0.12	64,507	0.17
1996	120,556,379	98,738	0.12	66,945	0.18
1997	141,960,034	107,170	0.13	72,951	0.19
1998	139,516,846	107,267	0.13	78,630	0.18
1999	146,188,508	116,801	0.13	80,909	0.18

The Gross Domestic Product (GDP) is a measure of economic growth and represents the value of goods and services produced in the province. Personal Income (PI) is the aggregate of income from all sources to individuals. Values for GDP (at market prices) and PI were obtained from Statistics Canada. GDP and PI values since 1992 reflect the revisions of the Canadian National Economic and Financial Accounts.

Fire Losses as a Percentage of Gross Domestic Product

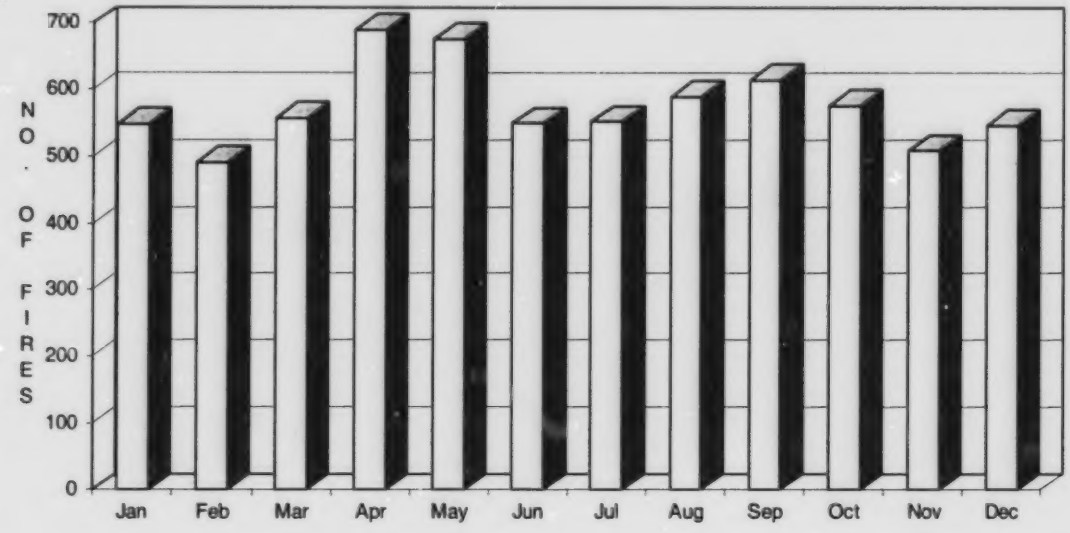


Fire Losses as a Percentage of Personal Income

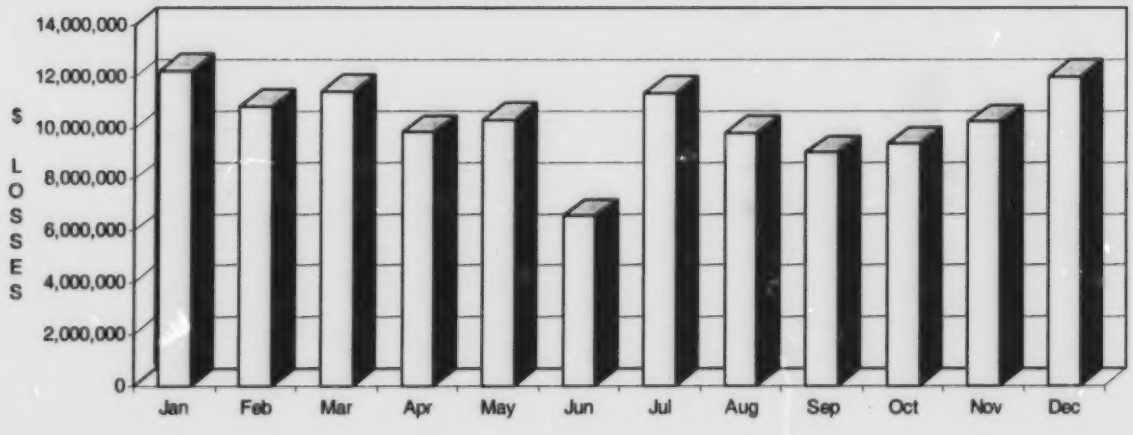


Commentary: As a percentage of gross domestic product, fire losses have decrease by 32% between 1990 and 1999. As a percentage of personal income, fire losses have declined by 28% over the same time period.

Average Number of Fires by Month 1990 - 1999

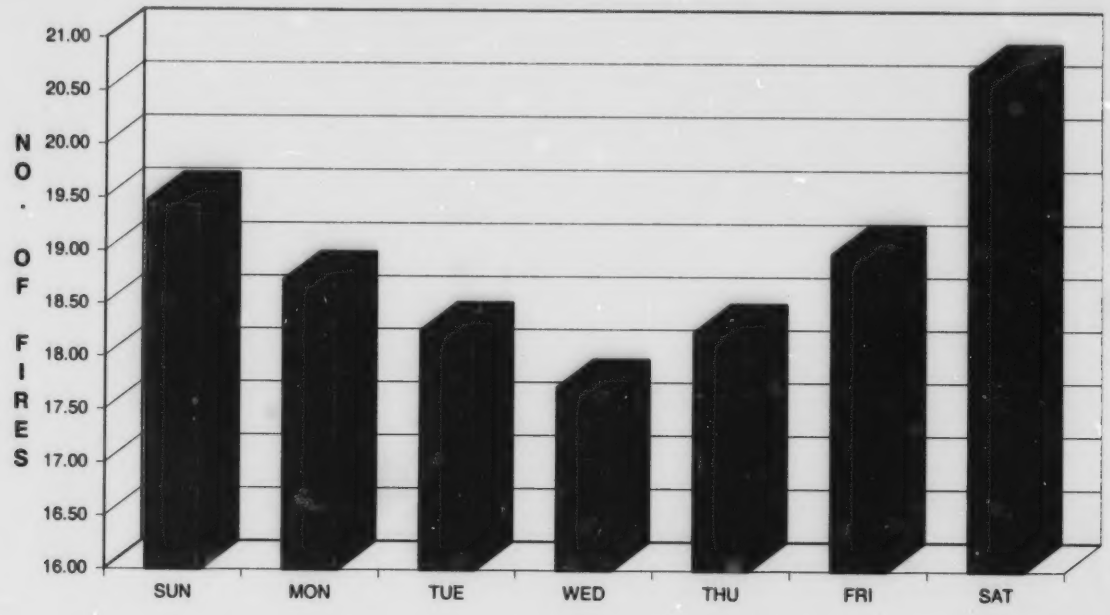


Average Fire Loss By Month 1990 - 1999

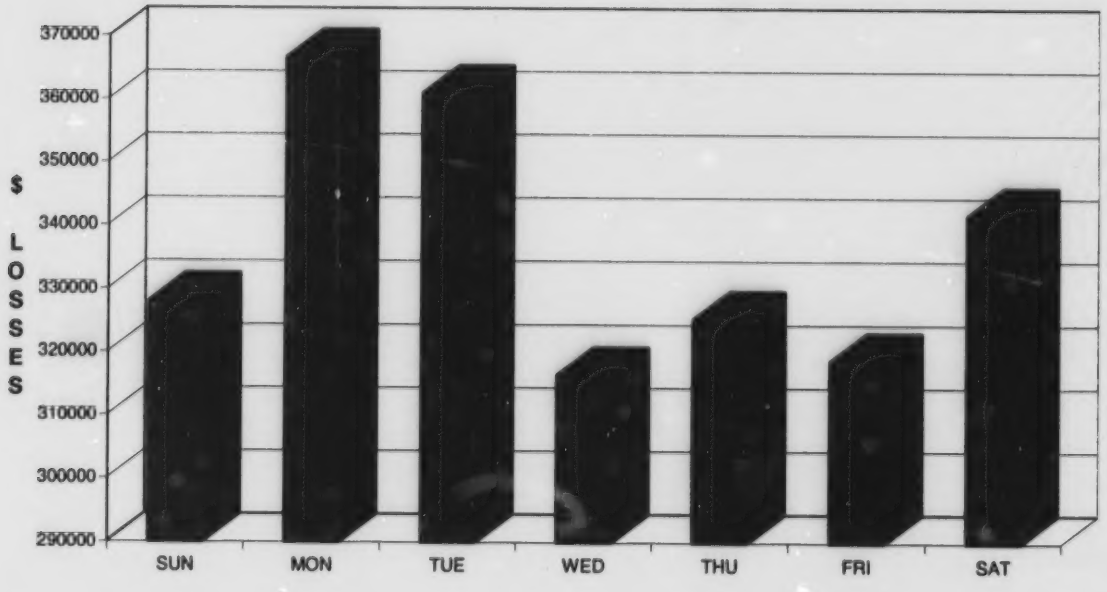


Commentary: April (689) and May (676) had the highest average number of fires per month, while January ($12,208,081), December ($11,99,855), March ($11,405,546) and July ($11,372,455) had the highest average fire losses per month.

Average Number of Fires by Day of Week 1990 – 1999

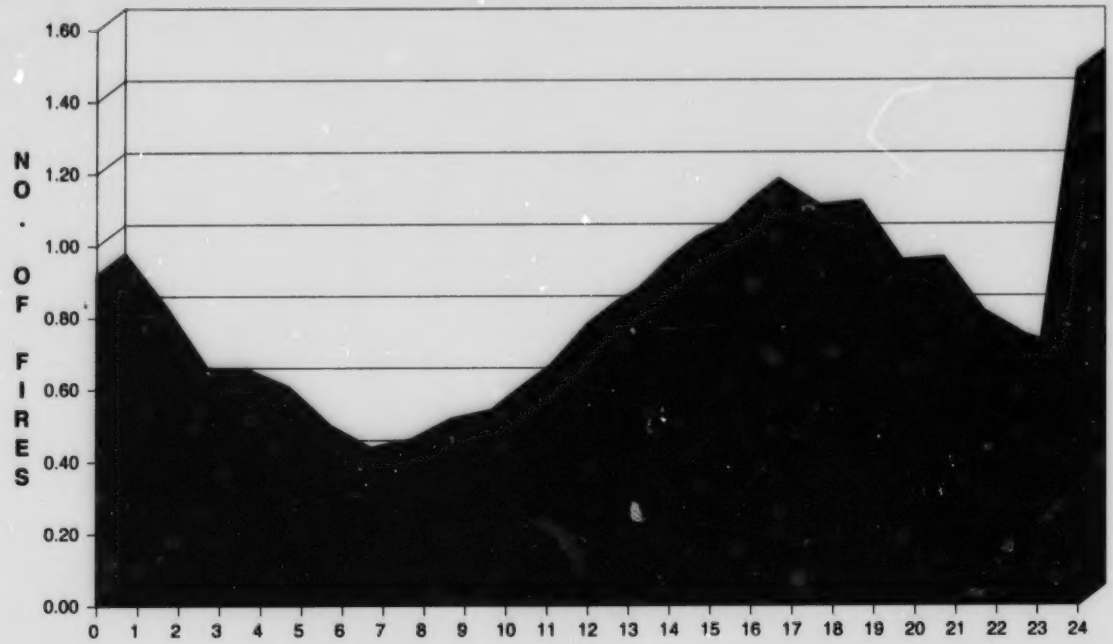


Average Fire Loss by Day of Week 1990 – 1999

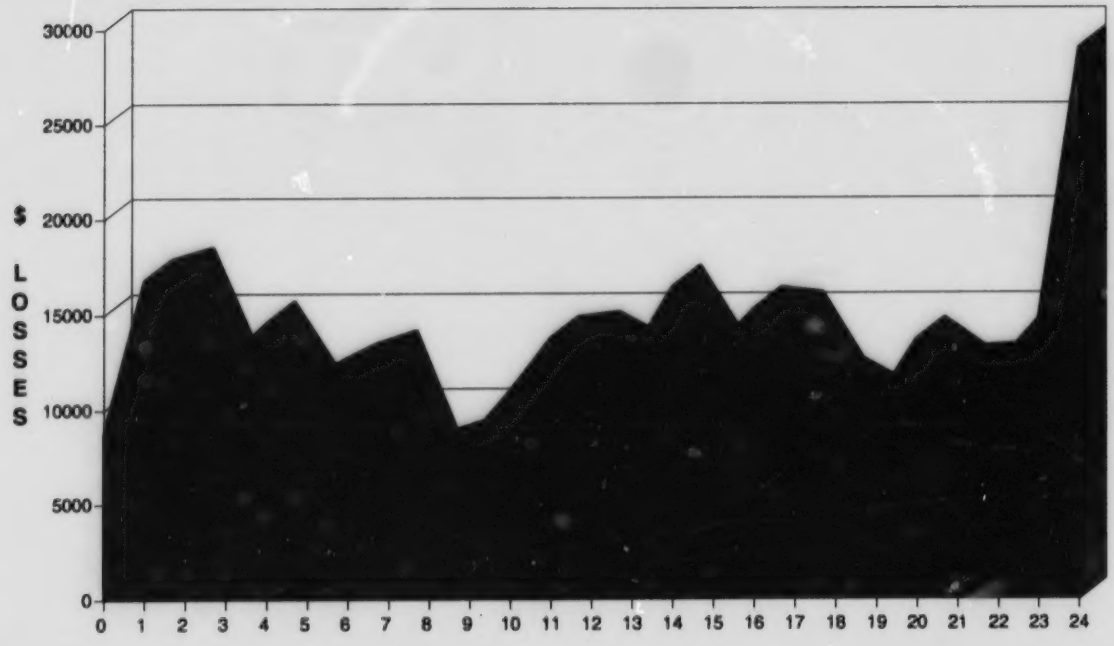


Commentary: The average number of fires was highest on Saturdays (21) but the highest average dollar loss occurred on Mondays ($328,056).

Average Number of Fires by Hour of Day 1990 – 1999



Average Fire Loss by Hour of Day 1990 – 1999



Commentary: 0 value for hour of day represents unknown time of fire. Where the time of fire was known, the number of fires peaked at 12 midnight, with the majority of fires occurring between the hours of 2 p.m. - 7 p.m. The average dollar loss was highest at 12 midnight ($28,973).

Fires by Loss Category - 1999

Loss Category	Fires	% Fires	Losses	% Losses
$1 - 99	748	11.7	9,622	0.0
$100 - 999	1713	26.8	564,783	0.4
$1,000 - 9,999	2254	35.3	7,504,602	5.1
$10,000 - 49,999	1084	17.0	24,701,306	16.9
$50,000 - 249,999	491	7.7	48,544,681	33.2
$250,000 - 499,999	55	0.9	18,261,820	12.5
$500,000 and over	35	0.5	46,601,694	31.9
Total	6380	100.0	146,188,508	100.0

1999 Large Loss Fires ($500,000 and over)

LOCATION	PROPERTY CLASS	ACT OR OMISSION	$ LOSSES
Parkland County	Industrial mfg-unclass.	Unknown	2,453,019
Cypress County	Petroleum refineries	Ignorance of hazard	575,000
Swan Hills	Outside ice rink	Construction deficiency	1,281,703
Wetaskiwin	Restaurant/café/diner	Suspected arson	600,000
Calgary	Large variety store	Physical or mental disability	1,031,000
Canmore	Bowling alley	Unknown	1,500,000
Calgary	Hotel/inn/lodge (year round use)	Arson/set fires-unknown	682,710
Clearwater M.D. #99	Gas distribution system, pipeline	Ignorance of hazard	3,225,906
Wood Buffalo Spec. Munic.	Building under construction	Unknown	525,000
Wood Buffalo Spec. Munic.	Bunkhouse/worker's barracks	Unknown	525,000
Calgary	Vacant property	Suspected arson	1,000,000
Yellowhead County	Gas distribution system, pipeline	Unknown	870,197
Northern Lights M.D. #22	Bridge, overpass, trestle	Inadequate control of open fire	500,000
Barrhead	Motor vehicle repair garage	Ignorance of hazard	894,780
Red Deer City	Lumberyard	Unknown	543,929
Edmonton City	Warehouse	Unknown	2,269,956
Brooks	Wood/furniture/paper storage-unclass.	Unknown	670,279
Foothills M.D. #31	Poultry, egg production	Electrical short circuit	558,644
Calgary City	Large variety store	Installed too close to combustible	5,010,000
Zama	Bus/truck/fleet storage	Fuel spilled accidentally	1,094,570
Strathcona County	Utility-unclass.	Part worn out	1,500,000
Calgary City	Petroleum refineries	Accident	6,591,362
Calgary City	One and two family dwellings	Lightning	692,433
Westlock County	Gas distribution system, pipeline	Misuse of equipment-unclass.	610,000
Barrhead County	Private service station	Unknown	565,000
Hinton	Hotel/inn/lodge (year round use)	Suspected arson	714,000
Cardston M.D. #6	Elevators/grain (commercial)	Improper storage	500,000
Mountain View County #17	Agricultural products storage-unclass.	Suspected arson	500,000
Ponoka	Supermarket (over 1000 sq. m)	Vandalism/mischief-no charges laid	4,714,283
Warburg	Heavy machinery & equipment storage	Design deficiency	608,000
Medicine Hat City	Sporting goods sales	Unknown	501,694
Medicine Hat City	Furniture store	Unknown	1,185,000
Medicine Hat City	Textile/wearing apparel sale-unclass.	Unknown	518,229
Wood Buffalo Spec. Munic.	Petroleum/natural gas well	Electrical short circuit	500,000
Wood Buffalo Spec. Munic.	Electric light & power generating plant	Part failure, leak, break	1,000,000

Fire Losses by Major Property Classifications - 1999

Property Classification		No. of Fires	% Of Total	Losses	% Of Total
Assembly	Theatre, Studio, Auditorium	4	0.1	270,801	0.2
	Amusement, Recreation Place	23	0.4	3,450,587	2.4
	School, College, University	58	0.9	556,979	0.4
	Church, Funeral Parlour	6	0.1	124,472	0.1
	Clubs, Social, Sport	3	0.0	111,000	0.1
	Museum, Art Gallery, Library	6	0.1	88,350	0.1
	Food or Beverage Establishment	56	0.9	1,785,982	1.2
	Sub Total	156	2.4	6,388,171	4.4
Institutional	Prison, Jail, Reformatory	3	0.0	20,115	0.0
	Home for the Aged	10	0.2	121,719	0.1
	Hospital, Sanatorium, Clinic	13	0.2	79,426	0.1
	Miscellaneous	1	0.0	1	0.0
	Sub Total	27	0.4	221,261	0.2
Residential	Miscellaneous	6	0.1	13,728	0.0
	One and Two Family Dwellings	1108	17.4	39,289,366	26.9
	Apartment, Tenement	394	6.2	5,503,082	3.8
	Rooming, Boarding House	10	0.2	593,917	0.4
	Hotel	33	0.5	1,568,326	1.1
	Motor Hotel	8	0.1	52,547	0.0
	Dormitory	13	0.2	770,121	0.5
	Mobile Home, Trailer	211	3.3	4,321,894	3.0
	Sub Total	1783	27.9	52,112,981	35.6
Business and Personal Service	Miscellaneous	3	0.0	5,502	0.0
	Office	36	0.6	1,143,619	0.8
	Personal Service	9	0.1	173,255	0.1
	Sub Total	48	0.8	1,322,376	0.9
Mercantile	Miscellaneous	7	0.1	203,100	0.1
	Food, Beverage Sale	17	0.3	4,896,568	3.3
	Textile, Wearing Apparel Sale	7	0.1	536,254	0.4
	Furniture, Appliance, Hardware Sales	10	0.2	1,581,701	1.1

(Continued)

Fire Losses by Major Property Classifications – 1999 (cont'd)

Property Classification		No. of Fires	% Of Total	Losses	% Of Total
Mercantile	Books, Newspapers, Drugs, Specialties	13	0.2	208,147	0.1
	Recreation, Hobby Supplies	6	0.1	533,951	0.4
	Repair Shop, Laundry, Dry Cleaner	13	0.2	723,409	0.5
	Motor Vehicles, Boats, Sales & Service	38	0.6	3,014,717	2.1
	Department, Variety Store	21	0.3	6,264,215	4.3
	Sub Total	132	2.1	17,962,062	12.3
Industrial Manufacturing Properties	Miscellaneous	12	0.2	2,819,645	1.9
	Chemicals, Petroleum, Paints, Plastics	22	0.3	8,389,579	5.7
	Wood, Furniture, Paper, Printing	27	0.4	990,162	0.7
	Metal/(Products), Elect. Equip. & Appl.	29	0.5	1,440,806	1.0
	Food Processing	14	0.2	448,276	0.3
	Beverage, Tobacco, Soap, Margarine	1	0.0	39,561	0.0
	Textiles	2	0.0	1,250	0.0
	Wearing Apparel, Footwear	1	0.0	7,043	0.0
	Sub Total	108	1.7	14,136,322	9.7
Storage Properties	Miscellaneous	42	0.7	3,516,003	2.4
	Agricultural Products	9	0.1	2,352,560	1.6
	Textiles, Fibres, Clothing	2	0.0	350	0.0
	Processed Food, Beverage	3	0.0	53,500	0.0
	Flammable Liq., Gases, Petro. Products	7	0.1	9,473	0.0
	Wood, Furniture, Paper and Products	38	0.6	1,394,758	1.0
	Chemicals, Plastics, Paints	3	0.0	57,300	0.0
	Metal Products, Machinery, Elect. Appl.	5	0.1	162,501	0.1
	Vehicle	225	3.5	5,035,989	3.4
	Sub Total	334	5.2	12,582,434	8.6
Special Property-Transportation Equip.	Outdoor Property	1045	16.4	436,330	0.3

(Continued)

Fire Losses by Major Property Classifications – 1999 (cont'd)

Property Classification		No. of Fires	% Of Total	Losses	% Of Total
Special Property-Transportation Equip.	Special Connecting Thoroughfares	1	0.0	500,000	0.3
	Under Construction/Demolition: Vacant	121	1.9	4,114,070	2.8
	Watercraft	13	0.2	145,024	0.1
	Rail Transport Vehicle and Equipment	6	0.1	31,492	0.0
	Ground Transport Vehicle	1661	26.0	9,689,153	6.6
	Aircraft	2	0.0	100,001	0.1
	Special Vehicles	295	4.6	10,297,193	7.0
	Sub Total	3144	49.3	25,313,263	17.3
Miscellaneous Property	Miscellaneous	10	0.2	28,910	0.0
	Laboratories	6	0.1	123,001	0.1
	Farm Facilities	326	5.1	5,992,336	4.1
	Miscellaneous Outbuildings	197	3.1	928,065	0.6
	Utility	95	1.5	7,969,999	5.5
	Cement, Glass, Pottery Manufacturing	3	0.0	245,001	0.2
	Mining, Quarrying	7	0.1	776,001	0.5
	Communications	4	0.1	86,325	0.1
	Sub Total	648	10.2	16,149,638	11.0
Total		6380	100.0	146,188,508	100.0

Commentary: The largest number of fires occurred in ground transport vehicles (1,661 or 26%), one and two family dwellings (1,108 or 17%) and outdoor property (1,045 or 16%). The highest dollar losses were in one and two family dwellings ($39,289,366 or 27%), followed by special vehicles ($10,297,193 or 7%) and ground transport vehicles ($9,689,153 or 7%).

Property Losses Related to Area of Origin - 1999

Property Classification	Means of Egress		Assembly Area		Function Area		Storage Area	
	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	13	68,298	11	1,019,301	65	1,921,786	10	106,711
Institutional	1	5,000	2	33,500	13	98,935	1	100
Residential	72	1,548,943	192	7,337,612	841	18,001,444	83	4,155,715
Business and Personal Service	8	353,472	2	37,501	16	728,797	3	4,101
Mercantile	9	52,186	9	6,203,397	22	1,461,714	18	566,935
Industrial Manufacturing Properties	1	5,000	.	.	21	1,176,188	13	1,211,240
Storage Properties	5	86,156	.	.	3	248,431	105	6,777,282
Special Property Transportation Equip.	13	235,183	9	1,134,115	23	1,080,055	13	120,800
Miscellaneous Property	.	.	.	.	9	91,002	107	2,986,757
Total	122	2,354,238	225	15,765,426	1013	24,808,352	353	15,929,641

Property Classification	Service Facilities		Service & Equipment Area		Structural Area		Vehicle Area	
	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	4	7,251	14	1,299,096	32	1,958,592	.	.
Institutional	.	.	3	53,025	5	30,600	.	.
Residential	30	539,322	62	2,549,813	326	11,344,399	24	300,061
Business and Personal Service	2	10,500	2	20,500	13	166,505	.	.
Mercantile	2	1,200	20	1,392,380	33	2,434,345	3	60,104
Industrial Manufacturing Properties	5	302,002	38	1,542,324	17	435,335	.	.
Storage Properties	2	1,900	9	1,844,296	122	1,685,121	20	388,134
Special Property Transportation Equip.	2	1,200	4	234,001	35	875,335	1975	20,262,861
Miscellaneous Property	1	500	17	1,518,860	206	1,795,014	13	260,942
Total	48	863,875	169	10,454,295	789	20,725,246	2035	21,272,102

Property Losses Related to Area of Origin – 1999 (cont'd)

Property Classification	Outside Area		Unknown	
	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	5	815	2	6,321
Institutional	2	101	.	.
Residential	70	625,019	83	5,710,653
Business and Personal Service	2	1,000	.	.
Mercantile	12	4,843,007	4	946,794
Industrial Manufacturing Properties	8	6,944,308	5	2,519,925
Storage Properties	55	502,930	13	1,048,184
Special Property Transportation Equip.	1055	965,233	15	404,480
Miscellaneous Property	249	8,675,916	46	820,647
Total	1458	22,558,329	168	11,457,004

Commentary: The most frequent areas of fire origin were in vehicle (32%), outside (23%), function (16%) and structural areas (12%).

Property Losses Related to Act or Omission – 1999

Property Classification	Incendiary Fires		Misuse of Source		Misuse of Material		Mech./Electrical Failure	
	No. Of Fires	$ Losses	No. Of Fires	$ Losses	No. Of Fires	$ Losses	No. Of Fires	$ Losses
Assembly	61	1,278,961	20	123,289	14	150,452	39	1,105,400
Institutional	7	3,468	3	700	2	88,917	8	95,375
Residential	206	7,047,521	363	8,767,889	313	6,020,638	299	9,450,689
Business and Personal Service	13	201,212	7	187,699	2	31,269	20	757,738
Mercantile	34	4,933,293	20	1,210,623	12	597,835	25	398,434
Industrial Manufacturing Properties	6	477,105	28	1,173,516	9	300,750	31	1,208,284
Storage Properties	110	3,160,503	55	759,773	23	2,216,402	48	745,880
Special Property Transportation Equip.	825	4,925,482	360	1,879,749	89	482,160	1162	10,235,948
Miscellaneous Property	121	465,114	188	2,492,110	22	333,594	102	5,102,948
Total	1383	22,492,659	1044	16,595,348	486	10,222,017	1734	29,100,692

Property Classification	Design Deficiency		Misuse of Equipment		Human Failing		Vehicle Accident	
	No. Of Fires	$ Losses	No. Of Fires	$ Losses	No. Of Fires	$ Losses	No. Of Fires	$ Losses
Assembly	3	1,407,553	.	.	10	210,330	.	.
Institutional	2	25,000	.	.	4	801	.	.
Residential	49	1,831,887	14	488,733	354	7,189,738	.	.
Business and Personal Service	.	.	.	.	3	1,000	.	.
Mercantile	7	5,079,119	1	52,000	14	2,112,830	1	1
Industrial Manufacturing Properties	5	6,001	.	.	15	7,343,925	.	.
Storage Properties	8	640,461	.	.	15	154,556	1	2,200
Special Property Transportation Equip.	15	130,189	8	16,751	99	922,274	59	475,582
Miscellaneous Property	15	305,694	5	676,910	31	3,558,751	1	1
Total	104	9,425,904	28	1,234,394	545	21,494,205	62	477,784

Property Losses Related to Act or Omission – 1999 (cont'd)

Property Classification	Unknown		Miscellaneous	
	No. Of Fires	$ Losses	No. Of Fires	$ Losses
Assembly	7	2,107,185	2	5,001
Institutional	1	7,000	.	.
Residential	158	10,238,345	27	1,077,541
Business and Personal Service	2	142,458	1	1,000
Mercantile	18	3,577,927	.	.
Industrial Manufacturing Properties	9	2,979,572	5	647,169
Storage Properties	63	4,488,229	11	414,430
Special Property Transportation Equip.	472	5,958,001	55	287,129
Miscellaneous Property	107	2,414,074	56	800,444
Total	837	31,912,791	157	3,232,714

Commentary: Misuse of source of ignition (20%), human failing (20%), misuse of material first ignited (18%) and mechanical, electrical failure/malfunction (17%) were the most frequent known acts or omissions in the residential property grouping.

Within the special property/transportation equipment grouping (made up of outdoor property, buildings under construction/demolition and vehicles), the most common known acts or omissions were mechanical, electrical failure/malfunction (37%) and incendiary (26%).

Incendiary fires in all property classes accounted for 22%, and act or omission was unknown or undetermined in 13% of the fires in Alberta during 1999.

Property Losses Related to Source of Ignition 1999

Property Classification	Cooking Equipment		Heating Equipment		Appliances & Equipment		Electrical Distribution Equipment	
	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	26	513,852	7	1,363,855	6	179,058	18	141,745
Institutional	2	15,200	.	.	3	84,067	3	85,000
Residential	427	6,016,415	154	4,642,452	132	2,723,070	123	5,508,878
Business and Personal Service	3	335,000	6	54,299	4	47,925	4	169,501
Mercantile	4	78,378	11	1,058,681	6	91,446	20	1,401,248
Industrial Manufacturing Properties	7	601,270	11	210,200	2	650	10	523,068
Storage Properties	1	3,500	25	1,365,438	4	116,113	24	417,865
Special Property Transportation Equip.	44	23,094	12	10,141	9	124,913	680	4,454,519
Miscellaneous Property	8	161,896	16	640,353	1	5,000	64	1,143,227
Total	522	7,748,605	242	9,345,419	167	3,372,242	946	13,845,051

Property Classification	Other Electrical Equipment		Smoker's Material & 'Open' Flames		Exposure		Miscellaneous	
	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	8	575,053	68	410,440	5	70,200	1	100,657
Institutional	4	10,525	12	2,719	.	.	1	15,000
Residential	56	3,111,172	523	13,559,363	126	3,110,754	29	452,114
Business and Personal Service	7	189,182	15	502,518	3	8,500	1	100
Mercantile	8	5,345,456	38	1,497,331	18	1,804,489	7	58,951
Industrial Manufacturing Properties	2	251,500	32	1,157,961	6	524,059	25	7,419,981
Storage Properties	8	110,592	65	711,521	107	1,943,150	16	913,081
Special Property Transportation Equip.	22	453,183	758	3,484,652	356	2,294,044	420	4,490,242
Miscellaneous Property	27	979,461	135	1,720,348	210	1,342,147	59	7,241,747
Total	142	11,026,124	1646	23,046,853	831	11,097,343	559	20,691,873

Property Losses Related to Source of Ignition 1999 (cont'd)

Property Classification	No Igniting Object		Unknown	
	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	.	.	17	3,033,311
Institutional	.	.	2	8,750
Residential	14	900,171	199	12,088,592
Business and Personal Service	.	.	5	15,351
Mercantile	1	655,000	19	5,971,082
Industrial Manufacturing Properties	.	.	13	3,447,633
Storage Properties	1	3,000	83	6,998,174
Special Property Transportation Equip.	1	40,000	842	9,938,475
Miscellaneous Property	10	129,279	118	2,786,180
Total	27	1,727,450	1298	44,287,548

Commentary: Smoker's material and 'open' flames (26%), electrical distribution equipment (15%), exposure fires (13%) and cooking equipment (8%) were the most common sources of ignition.

In residential properties the most common sources of ignition were smoker's material and 'open' flames (29%), cooking equipment (24%) and heating equipment (9%).

Sources of ignition were unknown in 20% of the fires in 1999, and these fires caused an average dollar loss of $34,120 per fire.

Property Losses Related to Fuel or Energy - 1999

Property Classification	Coal or Wood, etc.		Fuel Oil		Gasoline		Natural Gas or Other Fuel Gas	
	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	.	.	1	85,850	1	5,000	32	1,834,443
Business and Personal Service	.	.	1	500	.	.	6	62,324
Industrial Manufacturing Properties	3	10,000	.	.	3	114,446	24	1,112,753
Institutional	.	.	.	.	1	10,000	3	74,517
Mercantile	.	.	.	.	4	163,701	17	1,497,924
Miscellaneous Property	6	84,132	4	4,266,299	12	1,640,001	20	772,093
Residential	90	3,109,559	6	380,257	13	509,742	145	2,657,628
Special Property Transportation Equip.	9	8,787	23	1,446,134	261	1,239,420	89	377,169
Storage Properties	7	95,584	.	.	8	326,073	21	1,170,335
Total	115	3,308,062	35	6,179,040	303	4,008,383	357	9,559,186

Property Classification	Electricity		Exposure Fire		Lightning		Smokers Material	
	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	37	877,759	5	70,200	.	.	57	363,835
Business and Personal Service	19	783,183	3	8,500	.	.	13	320,560
Industrial Manufacturing Properties	28	887,149	6	524,059	.	.	5	267,067
Institutional	10	110,875	.	.	.	.	10	2,119
Mercantile	39	7,353,297	18	1,804,489	1	655,000	29	429,468
Miscellaneous Property	103	2,470,374	210	1,342,147	10	129,279	71	522,303
Residential	661	15,955,188	126	3,110,754	14	900,470	381	9,766,756
Special Property Transportation Equip.	715	5,123,617	356	2,294,044	1	40,000	645	2,427,253
Storage Properties	46	887,638	107	1,943,150	1	3,000	47	477,240
Total	1658	34,449,080	831	11,097,343	27	1,727,749	1258	14,576,601

Property Losses Related to Fuel or Energy – 1999 (cont'd)

Property Classification	Unclassified		Unknown	
	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	4	17,115	19	3,133,969
Business and Personal Service	1	131,958	5	15,351
Industrial Manufacturing Properties	15	7,628,994	24	3,591,854
Institutional	.	.	3	23,750
Mercantile	4	86,101	20	5,972,082
Miscellaneous Property	89	1,262,764	123	3,660,246
Residential	131	3,477,646	216	12,244,981
Special Property Transportation Equip.	185	1,732,885	860	10,623,954
Storage Properties	10	594,257	87	7,085,157
Total	439	14,931,720	1357	46,351,344

Commentary: Where known, the most common fuel or energy associated with the source of ignition were electricity (26%), smoker's material (20%), exposure fires (13%) and natural gas or other fuel gas (6%).

Fires where the fuel or energy is unknown accounted for 21% of the fires in 1999.

Property Losses Related to Material First Ignited – 1999

Property Classification	Clothing, Textiles		Furniture, Furnishings		Structural Components		Wood, Paper Products	
	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	7	912	6	50,451	26	3,700,468	35	596,132
Business and Personal Service	4	133,259	1	123,469	4	132,500	11	141,102
Industrial Manufacturing Properties	6	763,650	2	410,971	18	431,756	26	1,091,987
Institutional	7	10,716	1	32,000	7	31,200	3	52
Mercantile	10	119,225	1	500	26	7,614,138	25	5,199,392
Miscellaneous Property	2	10,800	4	18,600	178	2,025,524	69	1,535,294
Residential	107	2,265,859	239	9,548,572	343	12,233,983	149	3,188,774
Special Property Transportation Equip.	52	169,398	40	209,259	60	697,236	255	647,589
Storage Properties	10	153,247	6	62,710	114	2,321,449	50	551,215
Total	205	3,627,066	300	10,456,532	776	29,188,254	623	12,951,537

Property Classification	Agricultural Products		Chemicals		Flammable & Combustible Liquids		Flammable Gases	
	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	2	56	7	29,265	23	716,655	6	103,980
Business and Personal Service	1	400	5	72,051	2	30,869	2	9,061
Industrial Manufacturing Properties	7	72,652	3	40,369	19	7,202,974	8	792,001
Institutional	2	74,067	.	.	1	15,000	.	.
Mercantile	2	24,532	7	368,160	24	2,682,542	3	406,000
Miscellaneous Property	173	1,902,705	11	131,331	28	6,702,223	12	1,387,259
Residential	72	798,853	55	890,871	327	5,794,688	38	578,481
Special Property Transportation Equip.	345	2,912,614	102	432,781	551	4,019,898	67	520,661
Storage Properties	8	1,319,971	9	218,030	28	2,110,046	3	146,050
Total	612	7,105,850	199	2,182,858	1003	29,274,895	139	3,943,493

Property Losses Related to Material First Ignited – 1999 (cont'd)

Property Classification	Miscellaneous		Unknown	
	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	28	143,195	16	1,047,057
Business and Personal Service	11	552,551	7	127,114
Industrial Manufacturing Properties	9	451,882	10	2,878,080
Institutional	5	58,026	1	200
Mercantile	19	405,975	15	1,141,598
Miscellaneous Property	42	258,625	129	2,177,277
Residential	207	3,129,915	246	13,682,985
Special Property Transportation Equip.	745	3,443,199	927	12,260,628
Storage Properties	27	225,186	79	5,474,530
Total	1093	8,668,554	1430	38,789,469

Commentary: Where defined, the materials most commonly ignited first were flammable & combustible liquids (16%), structural components (12%), wood, paper products (10%) and agricultural products (10%).

Materials first ignited were unknown in 22% of the fires in 1999.

Property Losses Related to Initial Detection - 1999

Property Classification	Automatic Systems		Heat Alarm/Detector Device		Smoke Alarm/Detector Device		Visual Sighting/Personal Detection	
	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses	No. Of Fires	Losses
Assembly	3	451	2	56	14	832,717	127	5,349,137
Business and Personal Service	2	68,500	.	.	5	389,301	41	864,575
Industrial Manufacturing Properties	5	41,919	.	.	1	145,000	102	13,949,403
Institutional	.	.	4	16,751	6	37,266	17	167,244
Mercantile	5	5,129,147	2	135,000	3	7,025	120	12,605,462
Miscellaneous Property	.	.	.	.	.	.	631	15,719,498
Residential	9	741,511	4	19,550	186	4,044,382	1529	44,841,185
Special Property Transportation Equip.	.	.	.	.	1	1,000,000	3132	23,880,029
Storage Properties	3	5,200	.	.	1	90,000	323	11,587,234
Total	27	5,986,728	12	171,357	217	6,545,691	6022	128,963,767

Property Classification	Unclassified or Unknown	
	No. Of Fires	Losses
Assembly	10	205,810
Mercantile	2	85,428
Miscellaneous Property	17	430,140
Residential	55	2,466,353
Special Property Transportation Equip.	11	433,234
Storage Properties	7	900,000
Total	102	4,520,965

Commentary: Visual sighting or other means of personal detection accounted for 94% of all means of initial detection of fires in 1999, while smoke alarm/detector devices accounted for 3%.

Fires by Method of Fire Control and Extinguishment - 1999

Method of Fire Control and Extinguishment		No. of Fires	% Of Total	$ Losses	% Of Total
Hand Fire Extinguisher	Water pump tank	66	1.0	842,272	0.6
	Water pressurized	47	0.7	698,187	0.5
	Water soda-acid	2	0.0	750	0.0
	Foam	25	0.4	957,130	0.7
	Vapourizing liquid/Halon	2	0.0	8,500	0.0
	CO2	19	0.3	257,933	0.2
	Dry chemical	367	5.8	1,499,636	1.0
	Multipurpose dry chemical	56	0.9	222,216	0.2
	Hand fire extinguisher-Unclassified	25	0.4	189,151	0.1
	Sub Total	609	9.5	4,675,775	3.2
Standpipe System	Sm. hose/38 mm straight stream noz.	12	0.2	29,550	0.0
	Sm. hose/38 mm combination noz.	110	1.7	7,520,522	5.1
	Cont. flow/<38 mm combination noz.	3	0.0	7,501	0.0
	Sub Total	125	2.0	7,557,573	5.2
"Makeshift" Firefighting Aid	Garden hose	172	2.7	382,297	0.3
	Water bucket	120	1.9	265,521	0.2
	Small water container	108	1.7	225,002	0.2
	Sand bucket	3	0.0	1,150	0.0
	Dry chemical and scoop	3	0.0	950	0.0
	Baking soda	11	0.2	39,629	0.0
	Smothered by covering	81	1.3	214,631	0.1
	Snow	30	0.5	47,602	0.0
	Makeshift fire fighting aid-Unclassified	51	0.8	91,963	0.1
	Sub Total	579	9.1	1,268,745	0.9
Fire Department-Water	Booster hose, 25 mm or less	119	1.9	248,877	0.2
	38 mm hose, 1 hoseline	1809	28.4	12,703,146	8.7
	38 mm hose, 2 or more	922	14.5	31,940,885	21.8
	65 mm hose, 1 hoseline	16	0.3	189,000	0.1

(Continued)

Fires by Method of Fire Control and Extinguishment - 1999 (cont'd)

Method of Fire Control and Extinguishment		No. of Fires	% Of Total	$ Losses	% Of Total
Fire Department-Water	65 mm hose, 2 or more	40	0.6	3,205,207	2.2
	77 mm or larger hose, 1 or more	9	0.1	707,968	0.5
	Comb. of 38 mm, 65 mm, 77 mm or larger	371	5.8	41,772,822	28.6
	Portable water deluge set	6	0.1	150,241	0.1
	Fire department - water-Unclassified	131	2.1	3,638,638	2.5
	Sub Total	3423	53.7	94,556,784	64.7
Fire Department - Other Than Water	Crash-fire foam veh., using monitor	5	0.1	120,503	0.1
	Crash-fire foam veh., using handlines	6	0.1	398,300	0.3
	Pumper, foam hand. only, via eductor	117	1.8	1,936,767	1.3
	Vehicle, dry chemical, under 450 kg	4	0.1	31,950	0.0
	Fire dept. - other than water-Unclass.	13	0.2	75,070	0.1
	Sub Total	145	2.3	2,562,590	1.8
Sprinkler System	Wet pipe sys., alarm conn. to fire dept.	11	0.2	213,798	0.1
	Wet pipe sys., local alarm only	8	0.1	344,106	0.2
	Dry pipe sys., alarm conn. to fire dept.	1	0.0	6,000	0.0
	Dry pipe sys., local alarm only	2	0.0	310	0.0
	Sprinkler system-Unclassified	2	0.0	30,000	0.0
	Sub Total	24	0.4	594,214	0.4
Fixed System- Other Than Sprinklers	Carbon dioxide system	2	0.0	201	0.0
	Dry chemical system	2	0.0	1,650	0.0
	Foam-water system	3	0.0	2,150	0.0
	Water spray system	1	0.0	3,000	0.0
	Fixed sys. excluding sprinkler-Unclass.	1	0.0	10,000	0.0
	Sub Total	9	0.1	17,001	0.0

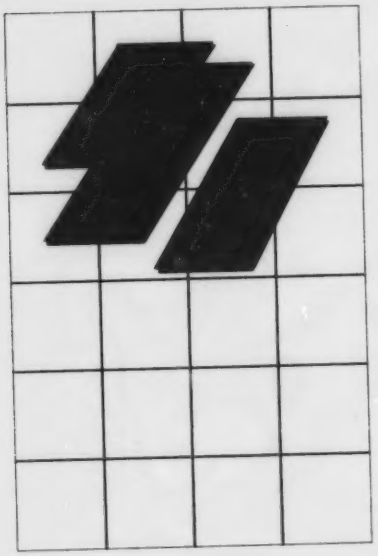
(Continued)

Fires by Method of Fire Control and Extinguishment - 1999 (cont'd)

Method of Fire Control and Extinguishment		No. of Fires	% Of Total	$ Losses	% Of Total
Burned Out	Burned out before fire dept. arrival	188	2.9	680,845	0.5
	Incapable of controlling	18	0.3	1,946,339	1.3
	Burned out-Unclassified	77	1.2	968,566	0.7
	Sub Total	283	4.4	3,595,750	2.5
Miscellaneous	Miscellaneous-Unclassified	70	1.1	1,409,442	1.0
	Sub Total	70	1.1	1,409,442	1.0
Unknown	Miscellaneous-Unknown	1113	17.4	29,950,634	20.5
	Sub Total	1113	17.4	29,950,634	20.5
Total		6380	100.0	146,188,508	100.0

Commentary: Where the method of fire control and extinguishment is known, fire departments extinguished 56% of all fires, while hand fire extinguishers and makeshift fire fighting equipment were used to extinguish 10% and 9% of fires, respectively.

SECTION 3



Alberta Home Fire Losses

Fire Commissioner's Statistical Report

1 9 9 9

Home Fires by Type of Home - 1999

Type of Home	Fires	% Of Fires	Deaths	% Of Deaths	Injuries	% Of Injuries	$ Losses	% Of $ Losses
One/Two Family Dwellings	1108	68	24	75	128	56	39,289,366	82
Apartments, Tenements, Flats	394	24	3	9	83	36	5,503,082	11
Mobile Homes	116	7	5	16	19	8	3,213,725	7
Total	1618	100	32	100	230	100	48,006,173	100

Commentary: Twenty-five percent of all fires in Alberta occurred in homes. Home fires accounted for 63% of all fire deaths (32 out of 51), 60% of all fire injuries (230 out of 385) and 33% of all dollar losses.

Home Fires by Major Areas of Fire Origin - 1999

Area of Origin	Fires	% Of Fires	Deaths	% Of Deaths	Injuries	% Of Injuries	$ Losses	% Of $ Losses
Kitchen/cooking area	428	26	3	9	53	23	7,155,398	15
Sleeping (under 5 occupants)	189	12	8	25	40	17	7,383,817	15
Living/rec./family room, lounge, den	186	11	9	28	58	25	7,084,851	15
Exterior wall	100	6	0	0	1	0	2,130,271	4
Laundry area	90	6	0	0	6	3	1,327,073	3
Court/patio/terrace	64	4	0	0	1	0	572,769	1
Heating equipment room	55	3	3	9	5	2	2,384,374	5
Exterior balcony/porch	53	3	0	0	4	2	1,872,049	4
Other*	391	24	6	19	58	25	13,590,288	28
Unknown	62	4	3	9	4	2	4,505,283	9
Total	1618	100	32	100	230	100	48,006,173	100

Commentary: Most home fires started in the kitchen/cooking area (26%). The highest percentage of both deaths (28%) and injuires (25%) occurred in the living/rec/family room/lounge/den. The highest dollar loss occurred in the sleeping (under 5 occupants) area (15%).

* "Other" category includes area of origin contributing individually to less than 3% of home fires.

Home Fires by Major Areas of Fire Origin and Sources of Ignition - 1999

Area of Origin	Source of Ignition	No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Kitchen/cooking area	Stove/top burner (fire in pan)	161	38	2	22	1,971,603
	Stove/top burner (deep fat fryer/pot)	93	22	0	24	1,012,343
	Stove/top burner (other circumstances)	54	13	0	3	568,127
	Oven of stove/range	33	8	0	2	291,094
	Other cooking eqpt.	30	7	0	1	872,417
	Other	57	13	1	1	2,439,814
	Area of Origin Total	428	100	3	53	7,155,398
Sleeping (under 5 occupants)	Smoker's material	45	24	4	9	1,015,726
	Candle, taper	26	14	0	4	557,668
	Other electrical eqpt.	15	8	0	1	437,896
	Match/lighter (not with smoking)	45	24	1	11	2,146,228
	Incandescent lamp/lightbulb/heat lamp	13	7	0	5	808,909
	Other appliances/eqpt.	15	8	0	5	393,853
	Other	30	16	3	5	2,023,537
	Area of Origin Total	189	100	8	40	7,383,817
Living/rec./family room, lounge, den	Smoker's material	54	29	5	29	2,082,106
	Candle, taper	39	21	2	8	1,499,465
	Other smoker's mtl./open flames	15	8	1	16	593,703
	Other electrical eqpt.	26	14	1	1	1,312,750
	Fireplace	22	12	0	2	375,534
	Other	30	16	0	2	1,221,293
	Area of Origin Total	186	100	9	58	7,084,851
Exterior wall	Smoker's material	7	7	0	0	39,131
	Other smoker's mtl./open flames	7	7	0	0	333,545
	Other electrical eqpt.	7	7	0	0	254,927

(Continued)

Home Fires by Major Areas of Fire Origin and Sources of Ignition – 1999 (cont'd)

Area of Origin	Source of Ignition	No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Exterior wall	Match/lighter (not with smoking)	10	10	0	0	83,375
	Exposure from detached structure fire	38	38	0	0	517,078
	Exposure from unclassified source	14	14	0	0	147,480
	Exposure from 'open' rubbish/camp fire	7	7	0	0	484,800
	Other	10	10	0	1	269,935
	Area of Origin Total	100	100	0	1	2,130,271
Laundry area	Other smoker's mtl./open flames	11	12	0	0	118,279
	Other electrical eqpt.	9	10	0	0	218,784
	Dryer for clothes	50	56	0	1	455,468
	Washing machine	7	8	0	0	12,214
	Unknown/unclassif.	5	6	0	2	253,437
	Other	8	9	0	3	268,891
	Area of Origin Total	90	100	0	6	1,327,073
Total		993	100	20	158	25,081,410

Commentary: Most kitchen fires started on stove/top burners (72%) and these caused 9% of deaths and 23% of injuries in home fires. Major sources of ignition in bedrooms were smoker's material (24%), matches/lighters not with smoking (24%) and candles (14%), and in the living rooms, smoker's material (29%). Exposure fires were the major sources of ignition (59%) where fires started on the exterior wall. Laundry area fires were primarily from the clothes dryer (56%).

Home Fires by Major Ignition Scenarios - 1999

Area of Fire Origin=Kitchen/cooking area			No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Source of Ignition	Act or Omission	Material First Ignited					
Stove/top burner (fire in pan)	Overheated cooking oil, grease, wax	Cooking oil/fat	96	22	0	13	1,117,455
		Other	10	2	0	1	116,052
	Other	Other	55	13	2	8	738,096
Stove/top burner (deep fat fryer/pot)	Overheated cooking oil, grease, wax	Cooking oil/fat	61	14	0	21	574,040
		Other	8	2	0	0	126,794
	Other	Other	24	6	0	3	311,509
Stove/top burner (other circumstance-s)	Combustible placed too close to heat	Cardboard, cardboard items	4	1	0	0	132,601
		Other	12	3	0	1	88,461
	Accident	Other	9	2	0	1	25,336
	Other	Other	29	7	0	1	321,729
Oven of stove/range	Overheated cooking oil, grease, wax	Cooking oil/fat	7	2	0	1	37,631
	Accident	Other	5	1	0	1	142,148
	Other	Other	21	5	0	0	111,315
Other	Other	Other	87	20	1	2	3,312,231
Total			428	100	3	53	7,155,398

Commentary: The most common ignition scenario (38%) in Alberta home kitchens is the ignition of overheated cooking oil on stovetops or in ovens of stoves. Cooking oil was the material first ignited in stovetop fires involving pans (60%) and deep-fat fryers or pots (66%). Fires in stovetop heated pans and deep-fat fryers or pots caused 42% and 45% of injuries in kitchens, respectively.

Home Fires by Major Ignition Scenarios - 1999

Area of Fire Origin=Sleeping (under 5 occupants)			No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Source of Ignition	Act or Omission	Material First Ignited					
Smoker's material	Smoker's material	Bedding	11	6	0	1	215,016
		Mattress/ pillow	12	6	0	4	224,596
		Other	14	7	4	4	503,856
	Other	Other	8	4	0	0	72,258
Match/lighter (not with smoking)	Child playing with	Bedding	9	5	1	2	359,692
		Other	23	12	0	8	880,300
	Other	Other	13	7	0	1	906,236
Candle, taper	Accident	Other	17	9	0	2	464,233
	Other	Other	9	5	0	2	93,435
Other appliances/ eqpt.	Other	Other	15	8	0	5	393,853
Other electrical eqpt.	Other	Other	15	8	0	1	437,896
Unknown/uncl-assif.	Other	Other	27	14	3	5	1,931,685
Other	Other	Other	16	8	0	5	900,761
Total			189	100	8	40	7,383,817

Commentary: Careless disposal of smoker's material leading to the ignition of mattress/ pillow/bedding/other materials (24%), children playing with matches/ lighters setting fire to bedding and other combustibles (17%), and candles igniting nearby combustibles (14%) were the leading ignition scenarios in bedrooms.

Home Fires by Major Ignition Scenarios - 1999

Area of Fire Origin=Living/rec./ family room, lounge, den			No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Source of Ignition	Act or Omission	Material First Ignited					
Smoker's material	Smoker's material	Furniture (upholstered)	31	17	3	18	1,304,351
		Other	10	5	0	6	473,757
	Other	Other	13	7	2	5	303,998
Candle, taper	Accident	Furniture (upholstered)	6	3	0	4	453,397
		Other	17	9	0	2	407,017
	Other	Other	16	9	2	2	639,051
Other electrical eqpt.	Other	Other	26	14	1	1	1,312,750
Fireplace	Ignorance of hazard	Floor covering: carpet/rug	4	2	0	0	97,558
		Other	5	3	0	1	125,042
	Other	Other	13	7	0	1	152,934
Other	Other	Other	31	17	1	16	789,132
Unknown/uncl-assif.	Other	Other	14	8	0	2	1,025,864
Total			186	100	9	58	7,084,851

Commentary: The most frequent ignition scenario in living room fires is careless disposal of smoker's materials igniting upholstered furniture and other materials (29%). The other frequent ignition scenario involves misuse of candles igniting nearby combustibles (21%).

Home Fires by Major Ignition Scenarios - 1999

Area of Fire Origin=Exterior wall			No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Source of Ignition	Act or Omission	Material First Ignited					
Exposure from detached structure fire	Suspected arson	Exterior wall cover, eave	10	10	0	0	80,454
		Other	5	5	0	0	41,800
	Smoker's material	Exterior wall cover, eave	3	3	0	0	109,000
		Wood/wooden items/plywood	2	2	0	0	32,000
		Other	1	1	0	0	100
	Other	Other	17	17	0	0	253,724
Exposure from unclassified source	Other	Other	14	14	0	0	147,480
Match/lighter (not with smoking)	Arson/set fire-Unknown	Gasoline	5	5	0	0	76,623
		Other	1	1	0	0	1,000
	Other	Other	4	4	0	0	5,752
Other	Other	Other	38	38	0	1	1,382,338
Total			100	100	0	1	2,130,271

Commentary: Approximately 52% of exterior walls ignited from exposure fires.

Home Fires by Major Ignition Scenarios - 1999

Area of Fire Origin=Laundry area			No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Source of Ignition	Act or Omission	Material First Ignited					
Dryer for clothes	Ignorance of hazard	Fibres/fibre products	12	13	0	0	14,234
		Other	5	6	0	0	69,917
	Part failure leak, break	Clothing: synthetic	3	3	0	0	901
		Other	6	7	0	0	21,901
	Other	Other	24	27	0	1	348,515
Other electrical eqpt.	Other	Other	9	10	0	0	218,784
Washing machine	Part worn out	Rubber-natural/ synthetic (tire etc.)	2	2	0	0	140
		Electric insulation in electric equip.	1	1	0	0	200
	Other	Other	4	4	0	0	11,874
Other	Other	Other	24	27	0	5	640,607
Total			90	100	0	6	1,327,073

Commentary: The major ignition scenario in the laundry area (56%) was in the clothes dryer, where the lint, clothing and other materials ignited due to ignorance of hazard (allowing lint to accumulate) or mechanical/electrical failure.

Home Fires by Major Ignition Scenarios - 1999

Area of Fire Origin=Court/ patio/terrace			No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Source of Ignition	Act or Omission	Material First Ignited					
Smoker's material	Smoker's material	Agricultural/-forestry products-Unclass.	18	28	0	1	212,979
		Other	10	16	0	0	8,275
Open fired broiler, portable (barbeque)	Part failure, leak, break	Other	5	8	0	0	9,650
	Other	Other	7	11	0	0	44,196
Unknown/uncl-assif.	Other	Other	6	9	0	0	193,091
Other	Other	Other	18	28	0	0	104,578
Total			64	100	0	1	572,769

Commentary: The most common ignition scenario in the court/patio/terrace area involved misuse of smoker's material igniting agricultural/forestry products (28%).

Home Fires by Major Ignition Scenarios - 1999

Area of Fire Origin=Heating equipment room			No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Source of Ignition	Act or Omission	Material First Ignited					
Central heating unit, furnace/ boiler	Part failure, leak, break	Other	5	9	0	0	137,880
	Mech., Elect. Failure-Unclassified	Natural gas	1	2	0	0	50
		Material first ignited-Unknown	1	2	2	1	324,957
		Insulation: plastic	1	2	0	0	11,852
		Structural materials-Unclassified	1	2	0	0	165,000
	Other	Other	12	22	0	2	546,302
Service water heater	Part failure, leak, break	Natural gas	1	2	0	0	1
		Propane/butan-e/liquefied petroleum gases	1	2	0	0	250
	Child playing with	Fuel oil: grades 1-6/kerosene	1	2	0	0	23,730
		Flammable/com-bustible liquid-Unclassif.	1	2	0	0	175,000
	Combustible placed too close to heat	Floor covering: carpet/rug	1	2	0	0	2,001
		Flammable liq.(flash pt<=37C):solv-ent	1	2	0	0	2,000
	Misuse of Mat. Ignited-Unclassified	Flammable gas-Unclassified	1	2	0	0	300
		Unclassified	1	2	0	0	40,952
	Ignorance of hazard	Wastepaper	1	2	0	0	700
		Flammable liq.(flash pt=>37C):lubr-ic.oil	1	2	0	0	45,941
	Other	Other	3	5	0	0	50,107
Other electrical eqpt.	Other	Other	5	9	1	0	351,450
Other	Other	Other	16	29	0	2	505,901
Total			55	100	3	5	2,384,374

Commentary: Furnaces (38%) and water heaters (24%) were the two major sources of ignition in heating equipment room ignition scenarios.

Home Fires by Major Ignition Scenarios - 1999

Area of Fire Origin=Exterior balcony/porch			No. Of Fires	% Of Fires	Deaths	Injuries	$ Losses
Source of Ignition	Act or Omission	Material First Ignited					
Smoker's material	Smoker's material	Agricultural/-forestry products-Unclass.	11	21	0	1	140,704
		Other	8	15	0	0	60,380
	Other	Other	4	8	0	0	240,423
Open fired broiler, portable (barbeque)	Child playing with	Floor covering: lino/tile/plastic	1	2	0	0	1,570
	Part failure, leak, break	Propane/butane/liquefied petroleum gases	2	4	0	0	16,500
	Human failing Unclassified	Floor covering: wood	1	2	0	0	218,226
		Rubber-natural/synthetic(tire etc.)	1	2	0	0	1,516
Match/lighter (not with smoking)	Child playing with	Furniture, plastic	1	2	0	0	6,172
		Wood/paper products-Unknown	1	2	0	1	80,000
	Impaired (suspect alcohol/drugs/medicn.)	Garbage, trash, rubbish	1	2	0	0	4,537
	Ignorance of hazard	Gasoline	1	2	0	0	500
Unknown/unclassif.	Other	Other	8	15	0	0	171,271
Other	Other	Other	13	25	0	2	930,250
Total			53	100	0	4	1,872,049

Commentary: The most common ignition scenario in the exterior balcony/porch area involved smoker's material igniting agricultural/forestry products and other materials (43%).

Major Causes of Home Fires In Alberta - 1999

Fire Causes	Fires	% Of Fires	Deaths	% Of Deaths	Injuries	% Of Injuries	$ Losses	% Of $ Losses
Cooking	408	25	2	6	60	26	5,971,521	12
Smoking	207	13	10	31	55	24	4,902,880	10
Arson/set Fire	166	10	4	13	17	7	5,051,560	11
Electrical	164	10	3	9	16	7	8,192,496	17
Home Heating	131	8	3	9	11	5	4,019,258	8
Child Fireplay	85	5	3	9	34	15	2,824,464	6
Clothes Dryer	58	4	0	0	1	0	517,186	1
Exposure Fire	53	3	0	0	0	0	1,300,452	3
Other Causes	346	21	7	22	36	16	15,226,356	32
TOTAL	1,618	100	32	100	230	100	48,006,173	100

Commentary: The major known causes of home fires in 1999 were cooking (25%), smoking (13%), arson/set fires (10%), and electrical (10%). Careless smoking was the number one cause of home fire deaths (31%), while cooking related fires cause most home fire injuries (26%).

Major Causes of Home Fires In Alberta 1990 - 1999

Fire Causes	Fires	% Of Fires	Deaths	% Of Deaths	Injuries	% Of Injuries	$ Losses	% Of $ Losses
Cooking	4,999	28	37	15	782	30	58,281,200	13
Smoking	2,020	11	80	32	507	19	44,176,077	10
Arson/set Fire	1,652	9	15	6	162	6	45,885,368	11
Electrical	1,516	8	10	4	158	6	57,736,090	13
Home Heating	1,457	8	20	8	201	8	42,001,666	10
Child Fireplay	1,192	7	16	6	314	12	27,551,444	6
Clothes Dryer	642	4	0	0	26	1	4,617,162	1
Exposure Fire	597	3	0	0	5	0	11,477,029	3
Other Causes	3,775	21	69	28	468	18	143,257,555	33
TOTAL	17,850	100	247	100	2,623	100	434,983,591	100

Commentary: The major known causes of home fires during the 10-year period were cooking (28%) and careless smoking (11%). Careless smoking caused the largest number of home fire deaths (32%), while cooking fires caused the largest number of home fire injuries (30%).

Home Fires by Smoke Alarm Operation - 1999

Smoke Alarm Operation	Fires	% Of Fires	Deaths	% Of Deaths	Injuries	% Of Injuries	$ Losses	% Of $ Losses
Not Installed	694	43	14	44	38	17	21,809,137	45
Installed	924	57	18	56	192	83	26,197,036	55
Total	1618	100	32	100	230	100	48,006,173	100

Smoke Alarm Operation	Fires	% Of Fires	Deaths	% Of Deaths	Injuries	% Of Injuries	$ Losses	% of $ Losses
Activated	335	36	5	28	75	39	10,253,958	39
Not activated	277	30	0	0	62	32	5,054,135	19
Unknown	312	34	13	72	55	29	10,888,943	42
Total	924	100	18	100	192	100	26,197,036	100

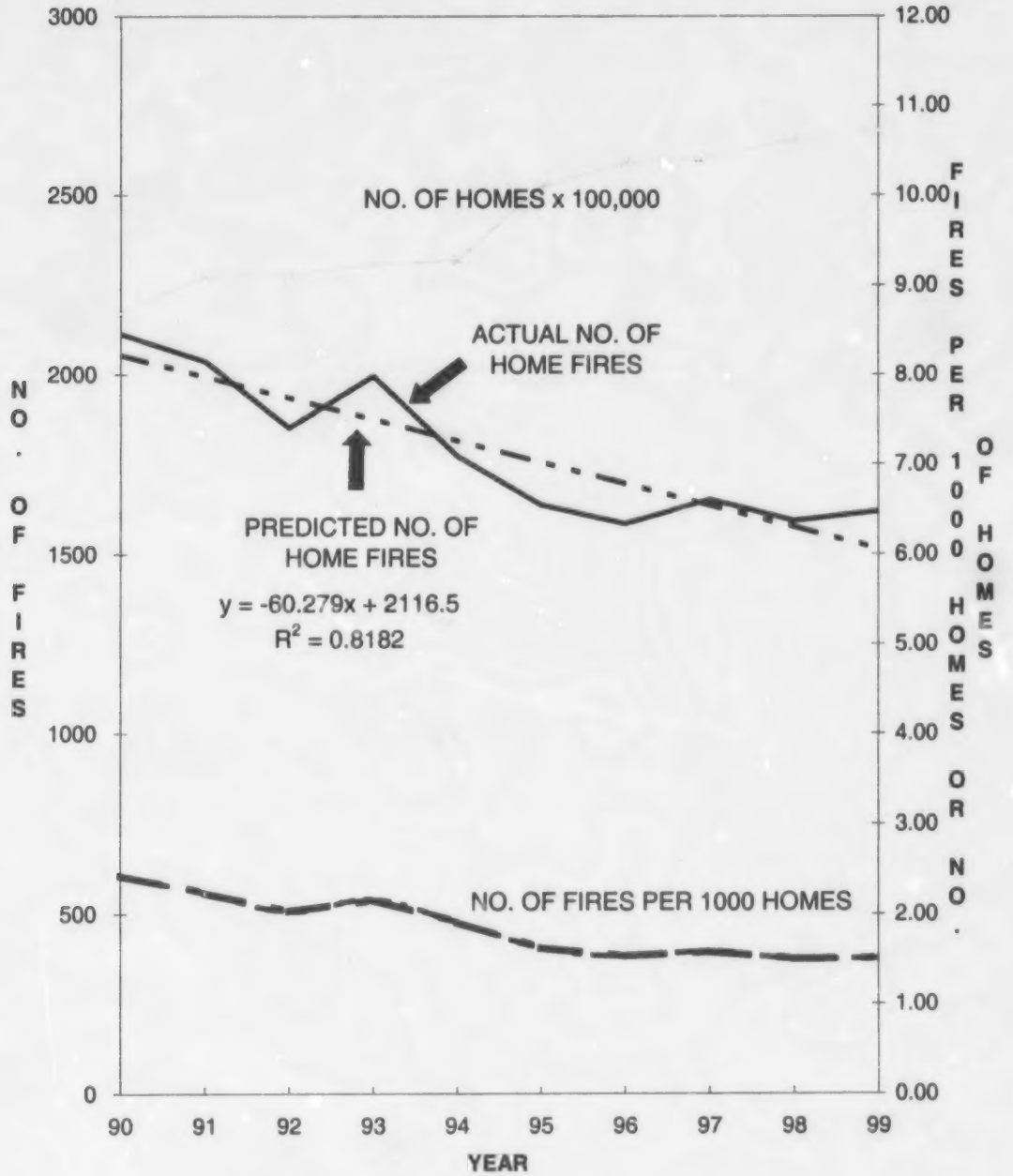
Smoke Alarm Operation	Fires	% Of Fires	Deaths	% Of Deaths	Injuries	% Of Injuries	$ Losses	% Of $ Losses
Assisted occupants to evacuate	232	69	4	80	52	69	7,469,202	73
Did not assist occupants	94	28	1	20	23	31	2,658,691	26
Unknown	9	3	0	0	0	0	126,065	1
Total	335	100	5	100	75	100	10,253,958	100

Smoke Alarm Operation	Fires	% Of Fires	Deaths	% Of Deaths	Injuries	% Of Injuries	$ Losses	% Of $ Losses
Alarm inaudible	3	3	0	0	1	4	53,856	2
Unable to respond	2	2	0	0	0	0	1,100	0
Handicapped	1	1	0	0	2	9	50,000	2
Under influence of alcohol/drugs	7	7	1	100	1	4	58,864	2
Unsuitable location	1	1	0	0	1	4	700	0
Unnecessary to evacuate	34	36	0	0	5	22	321,967	12
Other	28	30	0	0	10	43	1,384,613	52
Unknown	18	19	0	0	3	13	787,591	30
Total	94	100	1	100	23	100	2,658,691	100

Smoke Alarm Operation	Fires	% Of Fires	Deaths	% Of Deaths	Injuries	% Of Injuries	$ Losses	% Of $ Losses
Unsuitable location	8	3	0	.	0	0	109,399	2
No battery	52	19	0	.	23	37	1,173,178	23
Dead battery	17	6	0	.	2	3	274,953	5
Electricity off	7	3	0	.	1	2	381,754	8
Electricity not connected	17	6	0	.	1	2	159,639	3
Mechanical failure	4	1	0	.	1	2	66,215	1
Not enough smoke	115	42	0	.	9	15	1,189,375	24
Unknown	28	10	0	.	13	21	1,128,040	22
Other	29	10	0	.	12	19	571,582	11
Total	277	100	0	.	62	100	5,054,135	100

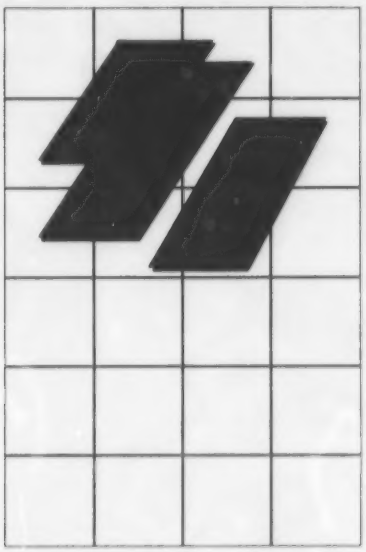
Commentary: In 1999, 43% of homes where fire occurred did not have smoke alarms installed. Lack of a power source was the major reason for no alarm activation (34%).

Trends in Alberta Home Fires, 1990 – 1999



Commentary: The actual number of home fires and the number of fires per 1,000 homes has declined in spite of an increase in the number of homes in Alberta between 1990 and 1999. A linear regression equation (y=mx+c), where the slope=-60 and intercept, c=2,117 predicts 1,453 as the number of fires (y) likely to occur in 2000.

SECTION 4



Municipal Fire Loss Statistics

Fire Commissioner's Statistical Report

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Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $-Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
GRANDE PRAIRIE COUNTY #1	GRANDE PRAIRIE COUNTY #1	13,750	99	1,629,793	7.2	118.53	923	20,749,144	6.7	150.90
	BEAVERLODGE	1,997	1	1,500	0.5	0.75	42	820,585	2.1	41.09
	HYTHE	712	.	.	.	.	8	39,407	1.1	5.53
	SEXSMITH	1,578	1	85,000	0.6	53.87	44	758,682	2.8	48.08
	WEMBLEY	1,523	.	.	.	.	36	220,204	2.4	14.46
VULCAN COUNTY	VULCAN COUNTY	3,829	15	355,225	3.9	92.77	140	2,884,927	3.7	75.34
	VULCAN	1,677	2	64,000	1.2	38.16	12	236,749	0.7	14.12
	ARROWWOOD	176	.	.	.	.	1	2,528	0.6	1.44
	CARMANGAY	258	.	.	.	.	3	4,001	1.2	1.55
	CHAMPION	362	.	.	.	.	8	109,838	2.2	30.29
	LOMOND	170	.	.	.	.	2	23,173	1.2	13.63
	MILO	121	.	.	.	.	.	.	.	.
PONOKA COUNTY	PONOKA COUNTY	8,313	26	794,656	3.1	95.59	267	6,032,459	3.5	72.57
	PONOKA	6,149	5	4,725,937	0.8	768.57	93	5,838,470	1.5	94.95
	RIMBEY	2,106	1	123,469	0.5	58.63	39	651,175	1.9	30.92
	PARKLAND BEACH S.V.	97	.	.	.	.	1	65,000	1.0	67.01
NEWELL COUNTY #4	NEWELL COUNTY #4	6,421	18	425,598	2.8	66.28	283	5,907,749	4.4	92.01
	BROOKS	10,093	20	953,018	2.0	94.42	192	6,071,123	1.9	80.15
	BASSANO	1,272	2	4,500	1.6	3.54	14	202,698	1.1	15.94
	DUCHESS	693	.	.	.	.	6	60,195	0.9	8.69
	ROSEMARY	332	.	.	.	.	1	889	0.3	0.27
	TILLEY	368	.	.	.	.	3	163,762	0.8	44.50
WARNER COUNTY #5	WARNER COUNTY #5	3,561	10	138,871	2.8	39.00	115	2,164,298	3.2	60.78
	WARNER	420	2	7,550	4.8	17.98	6	56,658	1.4	13.49
	MILK RIVER	929	1	5,500	1.1	5.92	7	679,908	0.8	73.19
	RAYMOND	3,056	5	426,331	1.6	139.51	47	1,798,667	1.5	58.86
	COUTTS	386	.	.	.	.	4	52,618	1.0	13.63
	STIRLING	874	2	24,500	2.3	28.03	14	215,864	1.6	24.68
STETTLER COUNTY #6	STETTLER COUNTY #6	5,278	23	667,630	4.4	126.49	209	3,271,806	4.0	61.99
	STETTLER	5,220	10	149,696	1.9	28.68	77	1,716,487	1.5	32.88
	BIG VALLEY	308	1	6,000	3.2	19.48	10	58,628	3.2	19.04
	BOTHA	194	.	.	.	.	3	70,690	1.5	36.44

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $- Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
STETTLER COUNTY #6	DONALDA	241	.	.	.	.	1	40,250	0.4	16.70
	GADSBY	40	.	.	.	.	1	80,000	2.5	200.00
	ROCHON SANDS S.V.	86	.	.	.	.	3	58,715	3.5	68.27
	WHITE SANDS S.V.	49	.	.	.	.	.	.	.	.
THORHILD COUNTY #7	THORHILD COUNTY #7	3,077	17	462,260	5.5	150.23	214	4,080,738	7.0	132.62
	THORHILD	485	.	.	.	.	9	469,480	1.9	96.60
FORTY MILE COUNTY #8	FORTY MILE COUNTY #8	3,230	18	200,208	5.6	61.98	184	3,013,850	5.7	93.31
	FOREMOST	556	.	.	.	.	2	106,300	0.4	19.12
	BOW ISLAND	1,688	.	.	.	.	26	1,928,531	1.5	114.25
	BURDETT	286	.	.	.	.	7	25,948	2.4	9.07
BEAVER COUNTY	BEAVER COUNTY	5,659	19	1,144,403	3.4	202.23	252	11,134,635	4.5	196.76
	RYLEY	465	4	281,000	8.6	604.30	13	404,073	2.8	86.90
	TOFIELD	1,726	2	17,000	1.2	9.85	29	652,731	1.7	37.82
	VIKING	1,081	1	26,368	0.9	24.39	20	673,137	1.9	62.27
	HOLDEN	397	.	.	.	.	4	1,173,450	1.0	295.58
WETASKIWIN COUNTY #10	WETASKIWIN COUNTY #10	10,467	48	648,906	4.6	62.00	314	9,154,564	3.0	87.46
	CRYSTAL SPRINGS S.V.	63	.	.	.	.	.	.	.	.
	MA-ME-O BEACH S.V.	81	.	.	.	.	11	375,812	13.6	463.97
	MILLET	1,894	.	.	.	.	29	1,185,016	1.5	62.57
	SILVER BEACH S.V.	47	1	13,082	21.3	278.34	1	13,082	2.1	27.83
	GRANDVIEW S.V.	60	.	.	.	.	.	.	.	.
	ARGENTIA BEACH S.V.	4	.	.	.	.	1	80,000	25.0	2000.00
	POPLAR BAY S.V.	70	.	.	.	.	.	.	.	.
	NORRIS BEACH S.V.	23	1	1,834	43.5	79.74	2	13,834	8.7	60.15
BARRHEAD COUNTY #11	BARRHEAD COUNTY #11	5,870	38	1,413,398	6.5	240.78	214	7,369,927	3.6	125.55
	BARRHEAD	4,239	7	942,548	1.7	222.35	54	2,246,676	1.3	53.00
ATHABASCA COUNTY #12	ATHABASCA COUNTY #12	7,415	25	776,266	3.4	104.69	201	8,076,131	2.7	108.92
	ATHABASCA	2,313	6	256,028	2.6	110.69	49	1,580,078	2.1	68.31
	BOYLE	868	4	10,600	4.6	12.21	11	218,814	1.3	25.21
	ISLAND LAKE S.V.	201	.	.	.	.	1	79,500	0.5	39.55
	SUNSET BEACH S.V.	33	.	.	.	.	1	4,500	3.0	13.64
	MEWATHA BEACH S.V.	94	.	.	.	.	3	3,649	3.2	3.88

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $- Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
ATHABASCA COUNTY #12	SOUTH BAPTISTE S.V.	66	.	.	.	.	3	101,457	4.5	153.72
	BONDISS S.V.	120	.	.	.	.	1	9,416	0.8	7.85
	ISLAND LAKE SOUTH S.V.	71	.	.	.	.	2	86,320	2.8	121.58
	WHITE GULL S.V.	24	.	.	.	.	4	6,002	16.7	25.01
	WEST BAPTISTE S.V.	36	.	.	.	.	1	81,116	2.8	225.32
	WHISPERING HILLS S.V.	79	.	.	.	.	.	.	.	.
SMOKY LAKE COUNTY	SMOKY LAKE COUNTY	2,782	16	227,292	5.8	81.70	140	2,938,805	5.0	105.64
	SMOKY LAKE	1,087	1	85,000	0.9	78.20	18	323,925	1.7	29.80
	VILNA	302	.	.	.	.	5	87,783	1.7	29.07
	WARSPITE	75	.	.	.	.	2	19,500	2.7	26.00
	WASKATENAU	237	.	.	.	.	4	30,600	1.7	12.91
	BUFFALO LAKE METIS SETTLEMENT	809	.	.	.	.	3	317,400	0.4	39.23
	KIKINO METIS SETTLEMENT	927	.	.	.	.	1	1,500	0.1	0.16
LACOMBE COUNTY	LACOMBE COUNTY	10,081	58	1,054,055	5.8	104.56	437	8,096,680	4.3	80.32
	LACOMBE	8,517	22	201,572	2.6	23.67	118	2,074,450	1.4	24.36
	ALIX	775	2	1,909	2.6	2.46	13	227,334	1.7	29.33
	BENTLEY	987	2	9,400	2.0	9.52	22	179,101	2.2	18.15
	BLACKFALDS	2,001	3	46,033	1.5	23.00	35	735,906	1.7	36.78
	CLIVE	517	1	75,000	1.9	145.07	6	336,301	1.2	65.05
	ECKVILLE	901	2	5,500	2.2	6.10	21	841,001	2.3	93.34
	GULL LAKE S.V.	149	2	2,001	13.4	13.43	11	297,983	7.4	199.98
	MIRROR	487	1	8,418	2.1	17.29	7	109,944	1.4	22.58
	BIRCHCLIFF S.V.	102	.	.	.	.	.	.	.	.
	HALF MOON BAY S.V.	53	.	.	.	.	1	598	1.9	1.13
	SUNBREAKER COVE S.V.	86	.	.	.	.	3	95,745	3.5	111.33
WHEATLAND COUNTY	WHEATLAND COUNTY	7,049	22	468,727	3.1	66.50	282	6,828,889	4.0	96.88
	STRATHMORE	6,794	1	2,500	0.1	0.37	72	920,283	1.1	13.55
	HUSSAR	157	.	.	.	.	2	4,500	1.3	2.87
	ROCKYFORD	346	1	10,073	2.9	29.11	6	103,216	1.7	29.83
	STANDARD	366	.	.	.	.	8	26,773	2.2	7.32

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $-Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
MOUNTAIN VIEW COUNTY	MOUNTAIN VIEW COUNTY	11,277	82	2,752,121	7.3	244.05	659	14,855,222	5.8	131.73
	DIDSBURY	3,553	4	6,300	1.1	1.77	61	874,983	1.7	24.63
	OLDS	5,815	24	125,498	4.1	21.58	139	2,918,058	2.4	50.18
	SUNDRE	2,190	7	456,247	3.2	208.33	48	1,061,458	2.2	48.47
	CARSTAIRS	2,086	3	304,728	1.4	146.08	24	464,695	1.2	22.28
	CREMONA	380	.	.	.	.	4	17,844	1.1	4.70
PAINTEARTH COUNTY #18	PAINTEARTH COUNTY #18	2,316	6	59,650	2.6	25.76	117	2,097,164	5.1	90.55
	CASTOR	970	6	42,100	6.2	43.40	13	229,886	1.3	23.70
	CORONATION	1,166	4	148,537	3.4	127.39	28	786,509	2.4	67.45
	HALKIRK	131	.	.	.	.	7	5,902	5.3	4.51
ST. PAUL COUNTY #19	ST. PAUL COUNTY #19	6,335	28	483,456	4.4	76.32	289	6,184,136	4.6	97.62
	ST. PAUL	4,970	14	102,616	2.8	20.65	99	1,189,311	2.0	23.93
	ELK POINT	1,492	3	196,680	2.0	131.82	18	811,920	1.2	54.42
	HORSESHOE BAY S.V.	39	.	.	.	.	3	31,501	7.7	80.77
TWO HILLS COUNTY #21	TWO HILLS COUNTY #21	2,753	12	350,448	4.4	127.30	165	2,220,580	6.0	80.66
	TWO HILLS	1,040	1	80,000	1.0	76.92	13	926,804	1.3	89.12
	DERWENT	110	.	.	.	.	1	20,629	0.9	18.75
	MYRNAM	294	1	320	3.4	1.09	3	496,320	1.0	168.82
	WILLINGDON	309	1	18,800	3.2	60.84	6	53,679	1.9	17.37
CAMROSE COUNTY #22	CAMROSE COUNTY #22	7,613	40	625,319	5.3	82.14	368	5,970,184	4.8	78.42
	BASHAW	775	1	100,000	1.3	129.03	10	194,581	1.3	25.11
	BAWLF	364	1	4,500	2.7	12.36	2	5,700	0.5	1.57
	BITTERN LAKE	193	.	.	.	.	1	2,000	0.5	1.04
	EDBERG	137	.	.	.	.	2	198,750	1.5	145.07
	FERINTOSH	130	.	.	.	.	2	133,000	1.5	102.31
	HAY LAKES	352	.	.	.	.	3	27,765	0.9	7.89
	NEW NORWAY	270	.	.	.	.	2	4,126	0.7	1.53
	ROSALIND	195	.	.	.	.	.	.	.	.
RED DEER COUNTY	RED DEER COUNTY	17,126	67	1,365,397	3.9	79.73	599	11,371,858	3.5	66.40
	INNISFAIL	6,773	5	4,181	0.7	0.62	70	633,222	1.0	9.35
	SYLVAN LAKE	5,178	3	23,602	0.6	4.56	65	1,476,605	1.3	28.52
	BOWDEN	1,014	2	41,412	2.0	40.84	18	187,054	1.8	18.45

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $-Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
RED DEER COUNTY	DELBURNE	641	1	350,000	1.6	546.02	10	939,109	1.6	146.51
	ELNORA	278	.	.	.	.	4	102,925	1.4	37.02
	PENHOLD	1,625	3	25,709	1.8	15.82	31	248,107	1.9	15.27
	NORGLEWOLD S.V.	281	.	.	.	.	1	1,500	0.4	0.53
	JARVIS BAY S.V.	83	.	.	.	.	.	.	.	.
VERMILION RIVER COUNTY #24	VERMILION RIVER COUNTY #24	7,553	35	983,742	4.6	130.25	376	9,784,979	5.0	129.55
	KITSCOTY	672	1	60,000	1.5	89.29	10	127,909	1.5	19.03
	VERMILION	4,303	5	25,408	1.2	5.90	67	816,352	1.6	18.97
	DEWBERRY	185	.	.	.	.	1	600	0.5	0.32
	MARWAYNE	449	.	.	.	.	8	393,583	1.8	87.66
	PARADISE VALLEY	141	.	.	.	.	3	1,354,800	2.1	960.85
LEDUC COUNTY	LEDUC COUNTY	12,361	72	1,543,707	5.8	124.89	640	12,661,401	5.2	102.43
	CALMAR	1,797	6	89,520	3.3	49.82	47	1,216,526	2.6	67.70
	DEVON	4,496	6	230,732	1.3	51.32	108	1,235,519	2.4	27.48
	NEW SAREPTA	359	1	1,000	2.8	2.79	16	638,952	4.5	177.98
	THORSBY	725	4	343,903	5.5	474.35	16	808,078	2.2	111.46
	WARBURG	549	2	613,764	3.6	1117.97	6	697,892	1.1	127.12
	ITASKA BEACH S.V.	6	.	.	.	.	.	.	.	.
	GOLDEN DAYS S.V.	92	.	.	.	.	.	.	.	.
	SUNDANCE BEACH S.V.	35	.	.	.	.	.	.	.	.
	BEAUMONT	6,518	4	60,938	0.6	9.35	52	1,195,572	0.8	18.34
LETHBRIDGE COUNTY #26	LETHBRIDGE COUNTY #26	9,290	53	820,683	5.7	88.34	461	10,421,898	5.0	112.18
	COALDALE	5,731	6	34,881	1.0	6.09	67	880,241	1.2	15.36
	PICTURE BUTTE	1,669	4	7,625	2.4	4.57	30	1,578,858	1.8	94.60
	BARONS	285	.	.	.	.	9	290,523	3.2	101.94
	NOBLEFORD	558	.	.	.	.	2	272,515	0.4	48.84
	COALHURST	1,465	2	2,001	1.4	1.37	25	223,935	1.7	15.29
MINBURN COUNTY #27	MINBURN COUNTY #27	3,643	18	289,694	4.9	79.52	211	2,418,320	5.8	66.38
	MINBURN	95	.	.	.	.	3	38,450	3.2	40.47
	MANNVILLE	758	2	127,955	2.6	168.81	15	568,224	2.0	74.96
	VEGREVILLE	5,337	13	223,167	2.4	41.82	93	1,597,861	1.7	29.94
	INNISFREE	238	.	.	.	.	7	49,108	2.9	20.63

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $-Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
LAC STE. ANNE COUNTY	LAC STE. ANNE COUNTY	8,737	24	451,401	2.7	51.67	247	5,833,763	2.8	66.77
	ONOWAY	788	1	20,000	1.3	25.38	13	233,594	1.6	29.64
	MAYERTHORPE	1,669	1	51,462	0.6	30.83	33	1,396,795	2.0	83.69
	ALBERTA BEACH	640	1	85,000	1.6	132.81	23	1,129,232	3.6	176.44
	CASTLE ISLAND S.V.	19	.	.	.	.	1	2,059	5.3	10.84
	SUNSET POINT S.V.	125	.	.	.	.	2	4,350	1.6	3.48
	SANGUDO	398	.	.	.	.	5	87,045	1.3	21.87
	WEST COVE S.V.	85	.	.	.	.	1	800	1.2	0.94
	YELLOWSTONE S.V.	97	.	.	.	.	1	2,100	1.0	2.16
	ROSS HAVEN S.V.	108	.	.	.	.	3	233,000	2.8	215.74
	VAL QUENTIN S.V.	123	.	.	.	.	3	6,300	2.4	5.12
	SILVER SANDS S.V.	105	.	.	.	.	1	15,000	1.0	14.29
	NAKAMUN PARK S.V.	14	.	.	.	.	.	.	.	.
	SOUTH VIEW S.V.	60	.	.	.	.	.	.	.	.
	BIRCH COVE S.V.	23	.	.	.	.	.	.	.	.
	SUNRISE BEACH S.V.	84	.	.	.	.	2	107,277	2.4	127.71
	SANDY BEACH S.V.	171	1	1	5.8	0.01	2	142,001	1.2	83.04
FLAGSTAFF COUNTY	FLAGSTAFF COUNTY	4,015	17	227,908	4.2	56.76	229	3,827,773	5.7	95.34
	SEDGEWICK	937	1	200,000	1.1	213.45	7	1,096,987	0.7	117.07
	ALLIANCE	169	.	.	.	.	1	5,200	0.6	3.08
	DAYSLAND	679	.	.	.	.	9	296,571	1.3	43.68
	HARDISTY	808	.	.	.	.	20	542,449	2.5	67.13
	FORESTBURG	930	3	7,500	3.2	8.06	16	827,689	1.7	89.00
	GALAHAD	175	.	.	.	.	5	261,949	2.9	149.69
	HEISLER	195	.	.	.	.	2	12,022	1.0	6.17
	KILLAM	1,048	1	80,000	1.0	76.34	11	636,458	1.0	60.73
	LOUGHEED	253	.	.	.	.	7	124,420	2.8	49.18
	STROME	269	.	.	.	.	3	99,206	1.1	36.88
LAMONT COUNTY	LAMONT COUNTY	4,212	17	407,099	4.0	96.65	303	5,068,347	7.2	120.33
	LAMONT	1,581	4	34,902	2.5	22.08	17	3,609,856	1.1	228.33
	CHIPMAN	230	.	.	.	.	11	82,692	4.8	35.95
	MUNDARE	653	.	.	.	.	10	20,568	1.5	3.15

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $- Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
LAMONT COUNTY	ANDREW	484	.	.	.	.	10	214,021	2.1	44.22
	BRUDERHEIM	1,198	3	2,801	2.5	2.34	21	359,163	1.8	29.98
PARKLAND COUNTY	PARKLAND COUNTY	24,769	48	3,252,486	1.9	131.31	646	21,169,692	2.6	85.47
	STONY PLAIN	8,274	7	57,678	0.8	6.97	74	1,502,102	0.9	18.15
	BETULA BEACH S.V.	8	.	.	.	.	.	.	.	.
	SPRING LAKE	425	.	.	.	.	5	121,403	1.2	28.57
	ENTWISTLE	453	.	.	.	.	11	112,592	2.4	24.85
	KAPASIWIN S.V.	12	.	.	.	.	.	.	.	.
	LAKEVIEW S.V.	15	.	.	.	.	3	17,428	20.0	116.19
	POINT ALISON S.V.	6	.	.	.	.	.	.	.	.
	SEBA BEACH S.V.	124	.	.	.	.	6	161,571	4.8	130.30
	WABAMUN	645	2	147,500	3.1	228.68	11	390,762	1.7	60.58
LAKELAND COUNTY	LAKELAND COUNTY	4,809	17	664,443	3.5	138.17	17	664,443	0.4	13.82
	LAC LA BICHE	2,611	12	103,244	4.6	39.54	99	1,685,171	3.8	64.54
	PLAMONDON	302	.	.	.	.	17	106,192	5.6	35.16
KNEEHILL COUNTY	KNEEHILL COUNTY	5,064	42	361,446	8.3	71.38	299	4,850,470	5.9	95.78
	THREE HILLS	3,375	5	10,147	1.5	3.01	75	1,152,022	2.2	34.13
	ACME	661	1	189,840	1.5	287.20	5	248,546	0.8	37.60
	TROCHU	958	1	107,657	1.0	112.38	11	144,337	1.1	15.07
	CARBON	450	.	.	.	.	8	99,417	1.8	22.09
	LINDEN	590	.	.	.	.	6	2,235,965	1.0	378.98
WOODLANDS COUNTY	WOODLANDS COUNTY	3,699	11	835,229	3.0	225.80	143	5,124,614	3.9	138.54
	WHITECOURT	8,008	7	233,361	0.9	29.14	117	4,034,144	1.5	50.38
BIRCH HILLS COUNTY	BIRCH HILLS COUNTY	1,515	12	662,721	7.9	437.44	118	3,507,420	7.7	231.51
	WANHAM	167	.	.	.	.	9	440,224	5.4	263.61
CYPRESS COUNTY	CYPRESS COUNTY	5,683	40	943,381	7.0	166.00	360	6,875,058	6.3	120.98
	REDCLIFF	4,104	11	505,543	2.7	123.18	128	1,529,035	3.1	37.26
STARLAND COUNTY	STARLAND COUNTY	2,075	1	97,000	0.5	46.75	89	1,119,476	4.3	53.95
	MORRIN	275	.	.	.	.	7	206,707	2.5	75.17
	DELIA	208	.	.	.	.	4	210,751	1.9	101.32
	MUNSON	204	.	.	.	.	3	120,258	1.5	58.95
WESTLOCK COUNTY	WESTLOCK COUNTY	6,958	32	1,646,720	4.6	236.67	302	7,955,615	4.3	114.34

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $-Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
WESTLOCK COUNTY	WESTLOCK	4,817	7	109,114	1.5	22.65	75	1,404,853	1.6	29.16
	CLYDE	427	2	100,000	4.7	234.19	6	507,089	1.4	118.76
	LARKSPUR S.V.	11	.	.	.	.	.	.	.	.
YELLOWHEAD COUNTY	YELLOWHEAD COUNTY	10,092	36	2,248,013	3.6	222.75	444	16,366,633	4.4	162.17
	EDSON	7,399	7	294,000	0.9	39.74	121	2,706,183	1.6	36.57
	HINTON	9,961	7	886,500	0.7	89.00	171	11,763,175	1.7	118.09
STURGEON COUNTY	STURGEON COUNTY	17,145	95	1,247,805	5.5	72.78	578	11,441,163	3.4	66.73
	MORINVILLE	6,226	21	331,834	3.4	53.30	95	843,582	1.5	13.55
	GIBBONS	2,748	1	1,955	0.4	0.71	40	955,221	1.5	34.76
	BON ACCORD	1,493	2	6,100	1.3	4.09	27	442,981	1.8	29.67
	LEGAL	1,095	1	350	0.9	0.32	12	189,175	1.1	17.28
	REDWATER	2,053	6	61,400	2.9	29.91	34	1,231,142	1.7	59.97
REGIONAL MUNICIPALITY OF WOOD BUFFALO	REGIONAL MUNICIPALITY OF WOOD BUFFALO	5,995	26	3,324,375	4.3	554.52	355	35,520,893	5.9	592.51
	FORT MCMURRAY	36,876	67	496,312	1.8	13.46	930	11,331,568	2.5	30.73
SPECIALIZED MUNICIPALITY OF STRATHCONA COUNTY	STRATHCONA COUNTY	22,888	44	3,579,253	1.9	156.38	767	21,888,783	3.4	95.63
	SHERWOOD PARK	42,452	49	528,119	1.2	12.44	536	4,305,582	1.3	10.14
SPECIALIZED MUNICIPALITY OF M.D. OF MACKENZIE #23	M.D. OF MACKENZIE #23	7,980	20	1,604,857	2.5	201.11	309	10,353,805	3.9	129.75
	HIGH LEVEL	3,093	14	40,917	4.5	13.23	110	4,040,243	3.6	130.63
	RAINBOW LAKE	1,138	1	24,717	0.9	21.72	25	1,175,353	2.2	103.28
TOWN OF DRUMHELLER	TOWN OF DRUMHELLER	7,833	17	204,861	2.2	26.15	133	2,973,853	1.7	37.97
M.D. OF CARDSTON #6	M.D. OF CARDSTON #6	4,565	13	395,462	2.8	86.63	176	2,448,712	3.9	53.64
	CARDSTON	3,417	3	118,040	0.9	34.54	33	518,444	1.0	15.17
	MAGRATH	1,867	6	133,589	3.2	71.55	44	1,211,317	2.4	64.88
	GLENWOOD	295	1	1	3.4	0.00	6	17,674	2.0	5.99
	HILLSPRING	206	.	.	.	.	3	17,601	1.5	8.54
M.D. OF PINCHER CREEK #9	M.D. OF PINCHER CREEK #9	3,172	7	174,970	2.2	55.16	203	3,453,696	6.4	108.88
	PINCHER CREEK	3,659	2	90,016	0.5	24.60	77	1,213,250	2.1	33.16
	COWLEY	273	.	.	.	.	14	541,666	5.1	198.41
M.D. OF TABER	M.D. OF TABER	5,971	28	439,557	4.7	73.62	275	6,331,791	4.6	106.04
	TABER	7,331	4	176,511	0.5	24.08	86	2,939,436	1.2	40.10

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $-Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
M.D. OF TABER	VAUXHALL	1,011	1	30,000	1.0	29.67	17	411,949	1.7	40.75
	BARNWELL	552	.	.	.	.	4	10,023	0.7	1.82
M.D. OF WILLOW CREEK #26	M.D. OF WILLOW CREEK #26	5,091	26	349,881	5.1	68.73	331	6,926,350	6.5	136.05
	STAVELY	513	.	.	.	.	8	227,329	1.8	44.31
	NANTON	1,665	3	21,790	1.8	13.09	32	158,623	1.9	9.53
	CLARESHOLM	3,427	1	1,000	0.3	0.29	60	287,059	1.8	8.38
	FT. MACLEOD	3,034	7	37,794	2.3	12.46	52	1,609,867	1.7	53.06
	GRANUM	337	.	.	.	.	9	30,542	2.7	9.06
M.D. OF FOOTHILLS #31	M.D. OF FOOTHILLS #31	16,122	70	1,484,688	4.3	92.09	520	9,723,693	3.2	60.31
	HIGH RIVER	7,359	11	181,233	1.5	24.63	80	6,876,551	1.1	93.44
	BLACK DIAMOND	1,811	1	27,000	0.6	14.91	34	366,166	1.9	20.22
	OKOTOKS	9,953	19	79,218	1.9	7.96	157	1,318,876	1.6	13.25
	TURNER VALLEY	1,575	1	6,773	0.6	4.30	29	350,367	1.8	22.25
	LONGVIEW	303	.	.	.	.	1	922	0.3	0.30
M.D. OF ACADIA #34	M.D. OF ACADIA #34	533	4	55,152	7.5	103.47	25	360,002	4.7	67.54
M.D. OF ROCKY VIEW #44	M.D. OF ROCKY VIEW #44	24,467	126	2,829,699	5.1	115.65	1011	21,341,731	4.1	87.23
	BEISEKER	781	2	60,740	2.6	77.77	9	588,166	1.2	75.31
	COCHRANE	10,391	23	736,526	2.2	70.88	178	1,564,128	1.7	15.05
	CROSSFIELD	2,003	1	32,000	0.5	15.98	13	2,469,188	0.6	123.27
	IRRICANA	962	.	.	.	.	13	276,032	1.4	28.69
	CHESTERMERE	2,552	2	9,100	0.8	3.57	16	161,249	0.6	6.32
M.D. OF PROVOST #52	M.D. OF PROVOST #52	2,705	13	279,945	4.8	103.49	160	3,298,260	5.9	121.93
	PROVOST	2,045	4	485,863	2.0	237.59	25	2,346,176	1.2	114.73
	AMISK	214	.	.	.	.	6	23,006	2.8	10.75
	CZAR	199	.	.	.	.	2	86,386	1.0	43.41
	HUGHENDEN	302	.	.	.	.	2	3,834	0.7	1.27
M.D. OF WAINWRIGHT #61	M.D. OF WAINWRIGHT #61	4,044	16	342,359	4.0	84.68	205	5,284,961	5.1	130.69
	WAINWRIGHT	5,219	3	53,100	0.6	10.17	85	3,488,983	1.6	66.85
	IRMA	472	.	.	.	.	12	792,641	2.5	167.93
	CHAUVIN	400	.	.	.	.	8	199,740	2.0	49.94

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

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M.D. OF WAINWRIGHT #61	EDGERTON	372	.	.	.	.	4	62,418	1.1	16.78
M.D. OF BONNYVILLE #87	M.D. OF BONNYVILLE #87	8,089	54	1,039,910	6.7	128.88	419	8,702,662	5.2	107.85
	BONNYVILLE	5,397	17	92,583	3.1	17.15	118	2,533,694	2.2	46.95
	COLD LAKE	12,128	15	155,478	1.2	12.82	127	1,728,742	1.0	14.25
	BONNYVILLE BEACH S.V.	64	.	.	.	.	1	2,000	1.6	3.13
	GLENDON	418	.	.	.	.	2	93,378	0.5	22.34
	PELICAN NARROWS S.V.	106	.	.	.	.	.	.	.	.
	ELIZABETH METIS SETTLEMENT	622	2	77,794	3.2	125.07	3	90,794	0.5	14.60
	FISHING LAKE METIS SETTLEMENT	499	.	.	.	.	4	47,600	0.8	9.54
M.D. OF SMOKY RIVER #130	M.D. OF SMOKY RIVER #130	2,491	10	599,274	4.0	240.58	210	4,451,796	8.4	178.72
	FALHER	1,149	1	51	0.9	0.04	57	2,203,491	5.0	191.77
	GIROUXVILLE	332	1	122,500	3.0	368.98	10	443,614	3.0	133.62
	MCLENNAN	957	3	302	3.1	0.32	34	991,453	3.6	103.60
	DONNELLY	403	.	.	.	.	9	505,939	2.2	125.54
M.D. OF SPIRIT RIVER #133	M.D. OF SPIRIT RIVER #133	809	7	242,252	8.7	299.45	109	3,100,788	13.5	383.29
	SPIRIT RIVER	1,112	.	.	.	.	24	618,220	2.2	55.60
	RYCROFT	667	.	.	.	.	17	1,188,191	2.5	178.14
M.D. OF PEACE #135	M.D. OF PEACE #135	1,562	8	228,693	5.1	146.41	127	1,582,172	8.1	101.29
	BERWYN	606	1	3,300	1.7	5.45	10	399,382	1.7	65.90
	GRIMSHAW	2,661	13	157,486	4.9	59.18	53	1,176,044	2.0	44.20
M.D. OF FAIRVIEW #136	M.D. OF FAIRVIEW #136	1,829	11	181,234	6.0	99.09	217	4,891,975	11.9	267.47
	FAIRVIEW	3,316	2	15,701	0.6	4.73	128	4,036,156	3.9	121.72
M.D. OF CLEARWATER #99	M.D. OF CLEARWATER #99	10,915	60	4,189,685	5.5	383.85	350	13,958,441	3.2	127.88
	ROCKY MOUNTAIN HOUSE	6,062	17	70,857	2.8	11.69	141	6,909,520	2.3	113.98
	CAROLINE	472	1	1	2.1	0.00	4	232,297	0.8	49.22
	BURNSTICK LAKE S.V.	7	.	.	.	.	.	.	.	.
M.D. OF BIGHORN #8	M.D. OF BIGHORN #8	1,269	3	28,050	2.4	22.10	78	1,833,923	6.1	144.52
	GHOST LAKE S.V.	63	1	2,200	15.9	34.92	3	12,917	4.8	20.50

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

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M.D. OF BIGHORN #8	CANMORE	10,239	11	1,771,694	1.1	173.03	108	7,501,811	1.0	73.27
	WAIPAROUS S.V.	47	.	.	.	.	.	.	.	.
M.D. OF BRAZEAU #77	M.D. OF BRAZEAU #77	6,589	15	282,800	2.3	42.92	206	8,236,105	3.1	125.00
	DRAYTON VALLEY	5,883	7	67,801	1.2	11.52	110	2,258,106	1.9	38.38
	BRETON	521	1	20,533	1.9	39.41	17	479,613	3.3	92.06
M.D. OF EAST PEACE #131	M.D. OF EAST PEACE #131	2,552	15	224,409	5.9	87.93	72	1,803,843	2.8	70.68
	PEACE RIVER	6,536	17	287,616	2.6	44.00	198	4,476,295	3.0	68.49
	NAMPA	427	.	.	.	.	18	3,753,447	4.2	879.03
M.D. OF GREENVIEW #16	M.D. OF GREENVIEW #16	5,433	29	2,561,722	5.3	471.51	317	12,477,070	5.8	229.65
	VALLEYVIEW	1,944	4	37,500	2.1	19.29	58	1,187,961	3.0	61.11
	FOX CREEK	2,321	3	112,467	1.3	48.46	22	768,791	0.9	33.12
	GRANDE CACHE	4,441	2	103,788	0.5	23.37	39	1,679,396	0.9	37.82
M.D. OF BIG LAKES	M.D. OF BIG LAKES	4,479	14	1,031,127	3.1	230.21	74	3,734,337	1.7	83.37
	HIGH PRAIRIE	2,907	3	165,748	1.0	57.02	71	6,615,434	2.4	227.57
	SWAN HILLS	2,030	2	1,281,704	1.0	631.38	20	1,529,036	1.0	75.32
	KINUSO	258	.	.	.	.	5	320,550	1.9	124.24
	EAST PRAIRIE METIS SETTLEMENT	401	.	.	.	.	.	.	.	.
	GIFT LAKE METIS SETTLEMENT	771	.	.	.	.	2	40,561	0.3	5.26
	PEAVINE METIS SETTLEMENT	566	.	.	.	.	1	40,000	0.2	7.07
M.D. OF SADDLE HILLS #20	M.D. OF SADDLE HILLS	2,724	9	328,159	3.3	120.47	127	3,992,459	4.7	146.57
M.D. OF CLEAR HILLS #21	M.D. OF CLEAR HILLS #21	2,886	11	283,131	3.8	98.10	226	4,102,538	7.8	142.15
	HINES CREEK	437	2	53,000	4.6	121.28	19	1,416,323	4.3	324.10
M.D. OF RANCHLAND #66	M.D. OF RANCHLAND #66	108	.	.	.	.	4	23,598	3.7	21.85
	CROWSNEST PASS	6,356	16	80,039	2.5	12.59	101	1,790,335	1.6	28.17
M.D. OF NORTHERN LIGHTS #22	M.D. OF NORTHERN LIGHTS #22	3,880	19	1,124,681	4.9	289.87	303	10,735,504	7.8	276.69
	MANNING	1,295	5	2,302	3.9	1.78	37	952,608	2.9	73.56
	PADDLE PRAIRIE METIS SETTLEMENT	699	.	.	.	.	5	245,958	0.7	35.19

(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

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M.D. OF LESSER SLAVE RIVER #124	M.D. OF LESSER SLAVE RIVER #124	2,716	6	359,324	2.2	132.30	57	2,887,007	2.1	106.30
	SLAVE LAKE	6,553	4	49,377	0.6	7.54	72	2,187,516	1.1	33.38
M.D. OF OPPORTUNITY #17	M.D. OF OPPORTUNITY #17	3,189	12	592,997	3.8	185.95	455	18,336,198	14.3	574.98
I.D. 4, WATERTON	I.D. #4, WATERTON	279	.	.	.	.	2	184,096	0.7	65.98
KANANASKIS IMPROVEMENT DISTRICT	KANANASKIS IMPROVEMENT DISTRICT	665	5	3,000	7.5	4.51	75	516,490	11.3	77.67
I.D. 9, BANFF	I.D. #9, BANFF	1,305	4	537,000	3.1	411.49	36	5,186,232	2.8	397.41
	BANFF	6,098	8	121,701	1.3	19.96	55	1,723,271	0.9	28.26
I.D. 12, JASPER	I.D. #12, JASPER PARK	77	2	38,489	26.0	499.86	25	727,288	32.5	944.53
	JASPER	4,691	4	79,099	0.9	16.86	65	3,655,025	1.4	77.92
I.D. 13, ELK ISLAND	I.D. #13, ELK ISLAND	10	.	.	.	.	2	2,754	20.0	27.54
I.D. 24, WOOD BUFFALO	I.D. #24, WOOD BUFFALO	370	.	.	.	.	2	15,000	0.5	4.05
INDIAN RESERVES	INDIAN RESERVES	50,707	129	5,331,750	2.5	105.15	991	30,056,801	2.0	59.28
S.A. #2	S.A. #2	2,531	9	276,057	3.6	109.07	103	1,907,106	4.1	75.35
	HANNA	3,001	3	31,409	1.0	10.47	38	1,685,052	1.3	56.15
	EMPRESS	186	.	.	.	.	.	.	.	.
S.A. #3	S.A. #3	1,584	4	128,497	2.5	81.12	68	779,498	4.3	49.21
	CEREAL	198	.	.	.	.	2	63,211	1.0	31.92
	OYEN	1,075	.	.	.	.	15	844,201	1.4	78.53
	YOUNGSTOWN	239	.	.	.	.	8	35,674	3.3	14.93
S.A. #4	S.A. #4	1,641	6	54,775	3.7	33.38	97	3,896,688	5.9	237.46
	VETERAN	317	1	28,000	3.2	88.33	7	91,011	2.2	28.71
	CONSORT	794	.	.	.	.	8	161,162	1.0	20.30

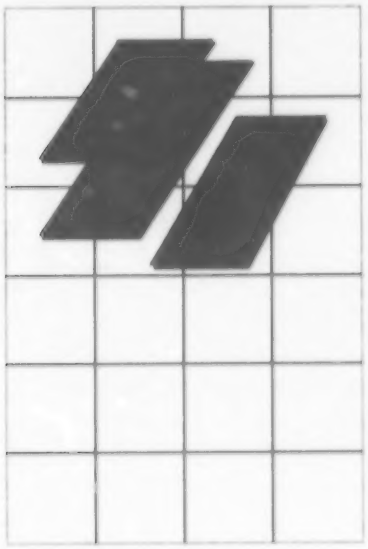
(Continued)

Municipal Fire Loss Statistics for the Year Ending December 31, 1999 and for the 10 - Year Period 1990 - 1999

Municipality		1999 Population	1999 Fire Count	1999 $-Losses	1999 Fire Rate	1999 Per Capita $-Loss	10 - Year Fire Count	10 - Year $ Losses	10 - Year Fire Rate	10 - Year Per Capita $-Loss
CITIES	CITY OF CALGARY	842,388	1599	29,930,648	1.9	35.53	18701	190,325,440	2.2	22.59
	CITY OF CAMROSE	14,290	17	131,489	1.2	9.20	192	3,618,566	1.3	25.32
	CITY OF EDMONTON	648,284	1186	14,699,964	1.8	22.68	13375	161,001,985	2.1	24.84
	CITY OF GRANDE PRAIRIE	31,140	142	871,401	4.6	27.98	1231	11,769,541	4.0	37.80
	CITY OF LETHBRIDGE	68,712	204	993,844	3.0	14.46	1814	9,887,896	2.6	14.39
	CITY OF LLOYDMINSTER	11,317	22	239,698	1.9	21.18	233	5,660,651	2.1	50.02
	CITY OF MEDICINE HAT	50,152	98	3,002,343	2.0	59.86	1008	14,574,695	2.0	29.06
	CITY OF RED DEER	63,940	82	1,515,522	1.3	23.70	1072	13,543,854	1.7	21.18
	CITY OF WETASKIWIN	10,959	18	1,057,444	1.6	96.49	138	4,774,635	1.3	43.57
	CITY OF ST. ALBERT	49,243	61	936,379	1.2	19.02	548	5,574,418	1.1	11.32
	CITY OF LEDUC	14,540	11	304,157	0.8	20.92	178	3,054,866	1.2	21.01
	CITY OF AIRDRIE	18,306	17	103,400	0.9	5.65	194	11,717,043	1.1	64.01
	CITY OF FT. SASKATCHEWAN	13,109	27	153,120	2.1	11.68	262	5,674,927	2.0	43.29
	CITY OF SPRUCE GROVE	15,069	23	374,579	1.5	24.86	223	3,645,616	1.5	24.19

Population figures for municipalities, including Indian Reserves, were obtained from the Department of Municipal Affairs, Local Government Services, Alberta Government.

SECTION 5



Glossary

GLOSSARY

ACT OR OMISSION

The human element by which someone has done something (an act) or failed to do something (an omission). The act or omission indicates whether the fire was deliberate, neglectful or accidental.

Incendiary or Set Fires: includes arson, suspected incendiarism, riot, mischief or vandalism.

Misuse of Source of Ignition: includes disposal of smoker's material, thawing, inadequate control of an open fire, children playing with source of ignition, welding or cutting too close to combustible material or torch too close to combustible material.

Misuse of Material Ignited: includes fuel spilled accidentally, improper fuelling technique, cleaning or washing parts, improper container, overheated cooking oil, combustible placed too close to heat, and improper storage.

Mechanical and Electrical Failure or Malfunction: includes part failure, automatic or manual control failure, electrical short circuit and part worn out.

Construction, Design or Installation Deficiency: includes construction or design deficiency, installation too close to a combustible, other installation deficiency or over fusing.

Misuse of Equipment: overfuelling, includes any misuse of equipment or tools.

Human Failing: includes person asleep, temporary loss of judgement, physical disability, panic, influence of alcohol or drugs and ignorance of hazard.

AREA OF ORIGIN

The area of a building or vehicle where the fire started.

Means of Egress: the area allowing an individual transit or a way of going out. Includes hallway, stairway, escalator, lobby and elevator.

Assembly, Sales Area: areas where groups of people gather. Includes theatre, arena, lounge, living room, sales or show room, library, museum and sports facility.

Function Area: the area where a mode of action or activity is undertaken. Includes sleeping area, dining area, bar, washroom, office, laboratory, printing and photographic reproduction area, kitchen, laundry room, operating room, performance area and manufacturing area.

Storage Area: the area inside a building where items are stored. Includes product storage area, closet, equipment area, records storage area, shipping and receiving area, trash and rubbish area, vehicle garage and agricultural product storage area.

Service Facilities: conveyance items such as dumbwaiters, service shafts, laundry and garbage chutes, heating and cooking ducts and chimneys or gas vents.

Structural Area: includes crawl space, balcony, ceiling and floor assembly, wall assembly, exterior wall or exterior roof and awning or canopy.

Vehicle Area: includes engine area, fuel area, control area, passenger area and cargo area.

Outside Area: includes open area such as lawn, field or park, court, patio, parking area, outdoor storage area and trash or rubbish area.

DEATH

A person killed accidentally as a direct result of a fire or a person who dies from a fire injury within one year following the date on which the injury was sustained.

Fire Death: refers to a person who died as a direct result of a fire, either by smoke inhalation or burns.

Death Involving Fire: refers to a person who was in a place where fire occurred, but who may have died from a cause other than the fire itself (e.g. a person who dies in an automobile accident where the vehicle subsequently catches fire prior to death, a suicide by burning or asphyxia, an incendiary fire set for the specific reason of killing).

FUEL OR ENERGY

Is the fuel associated with the source of ignition. Includes coal, wood, fuel oil, gasoline, natural gas or other fuel gases, smoker's material, electricity, lightning or exposures.

IGNITION SCENARIO

The combination of three components: the source of ignition, material first ignited and act or omission: in the chain of events that lead to a fire.

A small number of ignition scenarios recur in the ignition of fires that account for the majority of fire incidents. Identification of these helps locate problems more specifically for the design of appropriate prevention strategies.

INJURIES

A person accidentally injured as a direct result of a fire (a member of the fire department accidentally injured while in the process of fighting a fire or injured as a result of an accident while en route to or returning from the scene of an actual fire is considered a fire action injury).

Minor Injury: an injury that does not require hospitalization of over a 24-hour period or absence from work of not more than one full day.

Light Injury: an injury that required admission to a hospital of over 24 hours up to 48 hours and/or absence from work for a period of two to fifteen days.

Serious Injury: an injury that required admission to a hospital for a period of more than 48 hours and/or an absence from work for a period exceeding fifteen days.

MATERIAL FIRST IGNITED

The actual material that ignites and creates the fire condition.

Structural Components, Finish Materials: includes roof covering, wall covering, floor covering, structural component, ceiling covering and insulation.

Furniture, Furnishings: includes furniture, ironing board, mattress, bedding, drapery and broom, mop or brush.
Clothing, Textiles: includes clothing, fabric, fur and tarpaulin.

Wood, Paper Products: includes wood, wood shavings, paper, cardboard and paper stock.

Flammable Liquids: includes gasoline, fuel oil, flammable liquids, paint, varnish, tar, asphalt, polish and wax.

Flammable Gases: includes natural gas, propane, anaesthetic gas, acetylene and hydrogen.

Chemicals: includes starch, flour, cellulose nitrate, plastic, oxidizing material, magnesium and alloys, titanium, natural or synthetic rubber and ammonium nitrate.

Agricultural, Forestry Products: includes fibres, grains, hay, trees, felled timber, grass, fertilizer and manure.

Miscellaneous: includes coal, garbage, trash, oily rags and artificial trees.

PROPERTY CLASSIFICATION

The principal use or occupancy of the building.

Assembly: property for the gathering of persons for civic, political, travel, religious, social, educational or recreational purposes. Includes theatres, amusement or recreation places, schools, colleges, universities, churches, social or sport clubs, libraries and museums, eating establishments and passenger terminals.

Institutional: property for medical treatment, or care of persons suffering from illness, disease or infirmity, for the care of infants, convalescents or aged persons and for penal or corrective purposes. Includes prisons, jails, reformatories, homes for the aged, children's hospitals, hospitals and clinics.

Residential: property in which sleeping accommodation is provided for normal residential purposes. Includes one and two family dwellings, apartments, rooming or boarding houses, hotels, motels, dormitories and mobile homes.

Business and Personal Service: property for conducting business. Includes offices, personal services such as hairdressing and data processing or storage facilities.

Mercantile: property used for the display and sale of merchandise. Includes food and beverage sales, textile and clothing sales, furniture and appliance sales, books and specialty sales, recreational and hobby supply sales, repair shops, laundries, vehicle and boat sales and department or variety stores.

Industrial Manufacturing Properties: property where raw materials are transformed into new products and where the component parts of manufactured products are assembled. Includes chemical, petroleum, paint and plastic manufacturing; wood, furniture, and paper manufacturing; metal product and electrical equipment manufacturing; food processing; beverage, tobacco, soap and margarine manufacturing; textile manufacturing; footwear and wearing apparel manufacturing; and vehicle and related equipment manufacturing.

Storage Properties: property used primarily for the storage or sheltering of goods, merchandise, products, vehicles, or animals. Includes agricultural product storage; textile, fibre and clothing storage; processed food and beverage storage; flammable liquids, gas and petroleum products storage; wood, furniture, and paper products storage; chemical, paint and plastic storage; metal products, machinery, and electrical appliance storage and vehicle storage.

Special Property: Transportation Equipment: mainly outdoor property and transport equipment. Includes outdoor property, piers, buildings under construction or demolition, watercraft, rail transport vehicles, ground transport vehicles, aircraft and other special equipment.

Miscellaneous: includes laboratories, farm facilities, outbuildings, utilities, glass and pottery manufacturing, mining, communications and nucleonics.

SOURCE OF IGNITION

The actual equipment, device or object which brings about ignition.

Cooking Equipment: includes stove, range, food warming appliance, deep fat fryer, broiler and portable cooking unit.

Heating Equipment: includes central heating unit, service water heater, space heater, fireplace, chimney, flue pipe and steam or hot water pipe.

Appliances and Equipment: includes dryer, air conditioning equipment, pressing iron and incinerator.

Smoker's Material and "Open" Flames: cigarettes, pipes, cigars and/or matches, lighters when used in conjunction with smoking. Includes matches and lighters not associated with smoker's material, candles, cutting torches, welding equipment and hot ashes.

Exposure: includes exposure from an attached or detached structure, lumber yard, open fire, forest, grass and brush.

Miscellaneous: includes internal combustion engine, heat treatment equipment, industrial oven, tar pot, fireworks, conveyors, commercial and industrial machinery and chemical reactions.